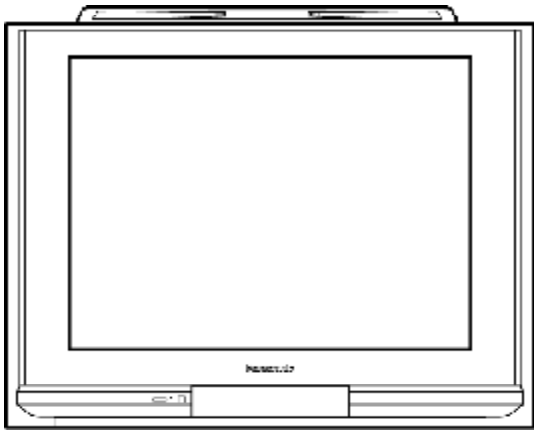
Order No. MTV0308224C3

Service Manual

Colour Television

TC-29P180H

MD3N Chassis



SPECIFICATIONS

Specifications

Power Source	AC Auto 110-240 V, 50 / 60 Hz
Power Consumption	197 W
	Standby condition: 11 W
Receiving System	
Function	21 Systems
Reception of broadcast	PAL B, G, H
transmissions and	PAL I
Playback	
from Video Cassette Tape	PAL D, K
Recorders	SECAM B, G
	SECAM D, K
	SECAM K1
	NTSC M (NTSC 3.58 / 4.5 MHz
Playback from special	NTSC 4.43 / 5.5 MHz
VCRs	NTSC 4.43 / 6.0 MHz
	NTSC 4.43 / 6.5 MHz
	NTSC 3.58 / 5.5 MHz
	NTSC 3.58 / 6.0 MHz
	NTSC 3.58 / 6.5 MHz)
	SECAM I

Playback from Special Disc	**PAL 60 Hz / 5.5 MHz**
Players and Special VCRs	**PAL 60 Hz / 6.0 MHz**
	PAL 60 Hz / 6.5 MHz
	SECAM 60 Hz / 5.5 MHz
	SECAM 60 Hz / 6.0 MHz
	SECAM 60 Hz / 6.5 MHz
	NTSC 50 Hz / 4.5 MHz
Receiving Channels	**Regular TV**
VHF BAND	**2-12 (PAL / SECAM B, K1)**
	0-12 (PAL B AUST.)
	1-9 (PAL B N.Z.)
	1-12 (PAL / SECAM D)
	1-12 (NTSC M Japan)
	2-13 (NTSC M U.S.A.)
UHF BAND	**21-69 (PAL G,H,I / SECAM G,K,K1)**
	28-69 (PAL B AUST.)
	13-57 (PAL D,K)
	13-62 (NTSC M Japan)
	14-69 (NTSC M U.S.A.)
CATV	**S1-S20 (OSCAR)**
	1-125 (U.S.A. CATV)
	C13-C49 (JAPAN)
	S21-S41 (HYPER)
	Z1-Z37 (CHINA)
	5A, 9A (AUST.)
Receiving Stereo System	**NICAM I, NICAM B / G, NICAM D, A2 (German)**
Tuning System	**Frequency synthesizer**
	Auto Search Tuning
	POSITION: 100 Position
	DIRECT: 125 Position
High Voltage	**31.0 ± 1.0 kV at zero beam current**
Picture Tube	**Overall Picture tube measured diagonally: 73 cm**
	Viewable Picture tube measured diagonally: 68 cm
	CRT Deflection: 104 °
Audio Output	**8W x 2 (Speaker) 14W (Woofer)**
Headphones	**3.5 mm Plug**
Aerial Impedance	**75 Ω Unbalanced Coaxial**
Video / Audio / Component	
AV 1, 2, 3, 4	
	S-Video In Y:1 Vp-p, 75 Ω
DVD	**C:0:3 Vp-p 75 Ω**
	Y 1.0Vp-p, 75 Ω
	P B 0.7Vp-p, 75 Ω
	P R 0.7Vp-p, 75 Ω
Monitor Out	**Video In 1 Vp-p, 75 Ω**

	Audio In Approx 0.4 V 47 kΩ
	Video Out 1 Vp-p, 75 Ω
	Audio Out Approx. 0.4 V 1 kΩ
AV1 IN (Rear): S-Video, Video, Audio L / R terminals	
AV2 IN (Front): S-Video, Video, Audio L / R RGB Terminals	
AV3 IN (Rear): Video, Audio L / R terminals	
AV4 IN (Rear): Video or Y / P_B / P_R , Audio L / R terminals	
RGB Input	High-DENSITY D-sub 15 pin
	31.5 kHz / 60 Hz (640 x 480 dot) and
	31.5 kHz / 70 Hz (640 x 400 dot)
Remote Control Transmitter	R6 (AA) Battery x 2
	75 Ω coaxial aerial plug
Dimensions (W x D x H)	699 mm x 509 mm x 584 mm
Weight (Mass)	53 kg (Net)

Note :

Design and Specifications are subject to change without notice.

Weight and Dimensions shown are approximate.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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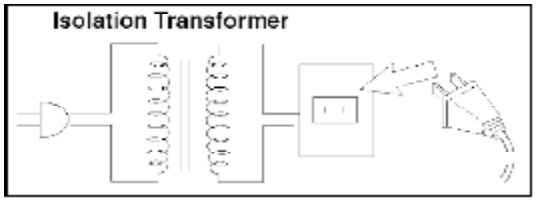
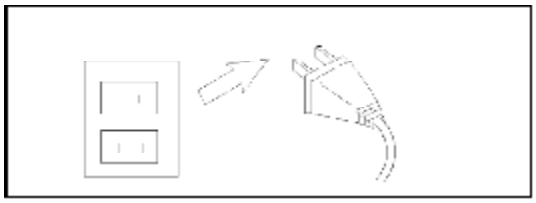
1. Safety Precautions

1.1. General Guide

1. It is advisable to insert an isolation transformer in the AC supply before servicing a hot chassis.



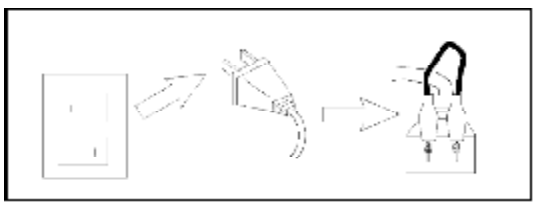
2. When servicing, observe the original lead dress, especially the lead dress in the high voltage circuits. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
3. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers, shields and isolation R-C combinations, are properly installed.
4. When the receiver is not to be used for a long period of time, unplug the power cord from the AC outlet.



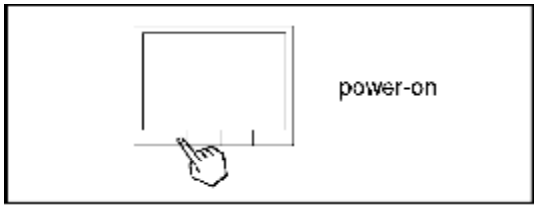
5. Potential, as high as 32.0 kV is present when this receiver is in operation. Operation of the receiver without the rear cover involves the danger of a shock hazard from the receiver power supply. Servicing should not be attempted byanyone who is not thoroughly familiar with the precautions necessary when working on high voltage equipment. Always discharge the anode of the picture tube to the receiver chassis before handling the tube.
6. After servicing make the following leakage current checks to prevent the customer from being exposed to shock hazards.

1.2. Leakage Current Cold Check

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.



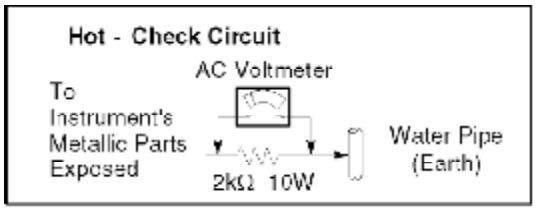
2. Turn on the receiver’s power switch.



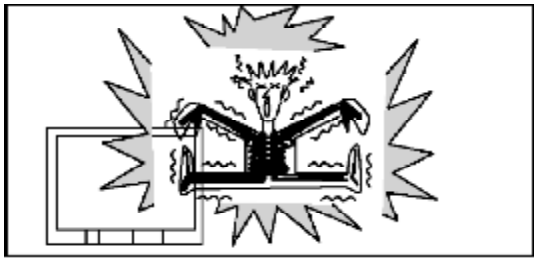
3. **Measure the resistance value, with an ohmmeter, between the jumper AC plug and each exposed metallic cabinet part on the receiver, such as screw heads, aerials, connectors, control shafts, etc. When the exposed metallic part has a return pathto the chassis, the reading should be between 4 M Ω and 20 M Ω . When the exposed metal does not have a return path to the chassis, the reading must be infinite.**

1.3. Leakage Current Hot Check (See Fig. 1)

1. **Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.**
2. **Connect a 2k Ω , 10 W resistor in series with an exposed metallic part on the receiver and an earth such as a water pipe.**
3. **Use an AC voltmeter, with high impedance type, to measure the potential across the resistor.**
4. **Check each exposed metallic part, and measure the voltage at each point.**



5. **Reverse the AC plug in the AC outlet and repeat each of the above measurements.**
6. **The potential any point should not exceed 1.0 V rms. In the case of a measurement being outside of the limits specified, there is a possibility of a shock hazard, and the receiver should be repaired and rechecked before it is returnedto the customer.**



1.4. X-Radiation

Warning:

1. **The potential sources of X-Radiation in TV sets are the EHT section and the picture tube. /**
2. **When using a picture tube test rig for service, ensure that the rig is capable of handling 32.0 kV without causing X-Radiation. /**

Note: It is important to use an accurate periodically calibrated high voltage meter. /

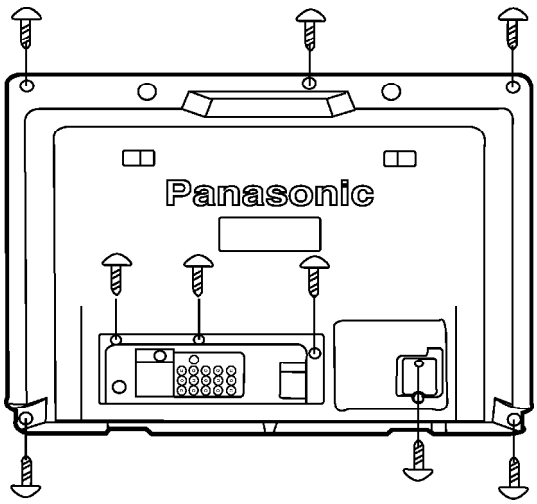
1. **Set the brightness to minimum.**
2. **Measure the High Voltage. The meter reading should indicate 31.0 ± 1 kV. If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.**
3. **To prevent the possibility of X-Radiation, it is essential to use the specified picture tube.**

2. SERVICE HINTS

2.1. HOW TO REMOVE THE REAR COVER

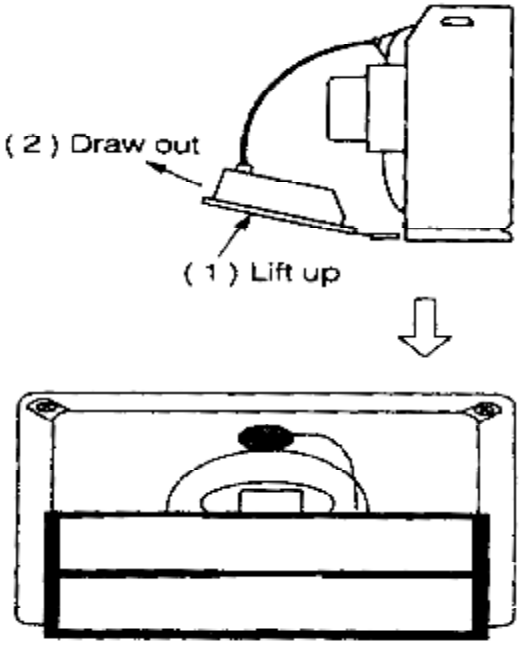
1. **Remove the 9 screws as shown in Fig. 1.**

Fig. 1



2.2. HOW TO MOVE THE CHASSIS INTO SERVICE POSITION

1. **Hold and lift the rear of the chassis and gently pull the chassis towards you as shown in Fig. 3.**
2. **Release the respective wiring clips and rotate the chassis vertically through 90° anticlockwise.**
3. **After servicing replace the bead clamper and ensure all wiring is returned to its original position before returning the receiver to the customer.**



2.3. HOTEL MODE

Purpose

1. **At Hotels, this Mode prevents the customer from changing the TV preset data such as Channel preset data. / / Note: This Mode is useful for Hotels. You should not get into “Hotel mode” with Normal use.**

Operation

1. **To get into “Hotel Mode”, press the remote control “Recall” button and Channel up “[+/]” key on the TVset simultaneously, after setting the “Off-Timer” mode.**
2. **In this mode, the Channel up and down Function will be enabled**

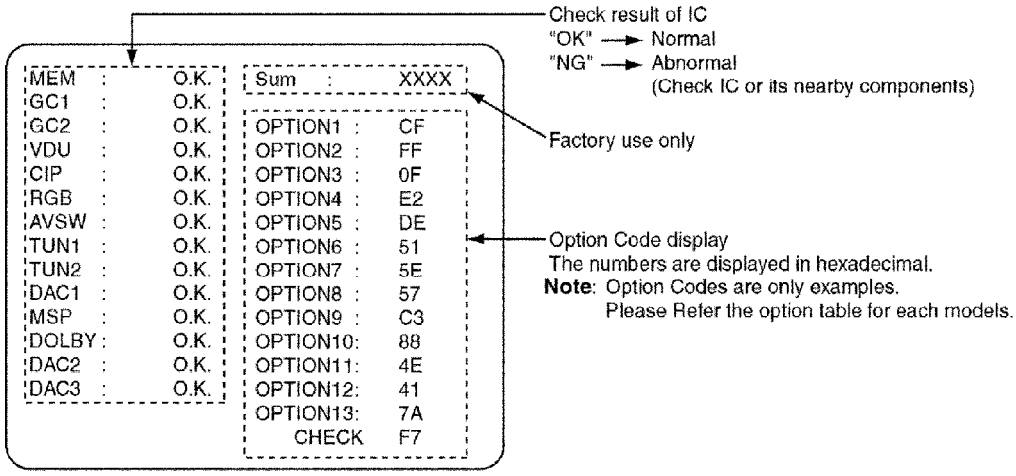
as normal and the maximum volume level for this mode is set at the current volume level, i.e. the setting at the level before entering the mode. However, other functions will bedisabled.

3. To exit this mode, exit “Off-Timer” mode and the “Volume Down [-/ V]” key simultaneously. / * This information isinformed by Service Manual only.

3. SELF CHECK

1. Self-Check is used to automatically check the bus lines and hexadecimal code of the TV set.

2. To get into the Self-Check mode, press the down n [-/ V] button on the customer controls at the front of the set, at the same time pressing the HELP button on the remote controland the screen will show:



4. SERVICE MODE FUNCTION

MPU controls the functions switching for each IIC through IIC bus in this chassis. The following setting and adjustment can be adjusted by remote control in Service Mode.

4.1. HOW TO ENTER SERVICE 1

1. In sound menu, set BASS to MAX and set TREBLE to MINIMUM.

2. Simultaneously press INDEX button on remote control and VOLUME DOWN button [-] on the TV set.

4.2. HOW TO ENTER SERVICE 2

1. Set the channel to CH99.

2. Press HOLD button on remote control. / Note: / To exit Service mode, press N or Power button on remote control.

SERVICE 1

Function	Average Data
H-Pos	87
V-Pos	69
H-Amp	80
V-Amp	144
Parabola	42
Trapezoid	123
H-Parallel	7
V-Linear	33
Top-Corner	22
Bottom-Corner	21
V-S-Correct	12
C-Correct	7
DAF-Phase	189
R High (Drive)	158
G High (Drive)	140
B High (Drive)	174
R Low (Cut off)	412
G Low (Cut off)	384
B Low (Cut off)	299
Sub-Bright	83
Sub-Geomagnetic	135
RF AGC 1	23
Sub-Contrast	103
Sub-Colour	38
Sub-NTSC Tint	2
SECAM B-Y	194
SECAM R-Y	69
RF AGC 2	25
Sub-NTSC Tint2	-5
Sub SECAM B-Y	193
Sub SECAM R-Y	68
Video Gain 2	144
SPL, Gain	0

- Press the RED/GREEN button to step up/down through the functions.
- Press the YELLOW/BLUE button to change the function values.
- Press the STR button after each adjustment has been mode to store the required values.

①Set the Aspect mode 16:9.
a. Receive PAL signal and adjust each item.
b. Next, receive NTSC signal and adjust each time

②Set the Aspect mode 4:3.
a. Receive PAL signal and confirm the picture.
Adjust each item if necessary.
b. Next, receive NTSC signal and confirm the picture.
Adjust each item if necessary.

CH99 + HOLD button

CH99 + INDEX button

SERVICE 2

Function	TC-29P180H
OPTION 1	FF
OPTION 2	FF
OPTION 3	00
OPTION 4	DF
OPTION 5	F3
OPTION 6	4D
OPTION 7	FD
OPTION 8	F7
OPTION 9	2C

Options Model		Description		
option1		00		
0E0	b0	1	Colour system (TV)	PAL(1)
	b1	1		SECAM(1)
	b2	1		NTSC(1)
	b3	1		M.NTSC(1)
	b4	0	Colour system (AV)	PAL(1)
	b5	0		SECAM(1)
	b6	1		NTSC(1)
	b7	1		M.NTSC(1)
option2		00		
0E1	b0	1	CH Plan	ASIA/M.E/HK/UK/CHINA(1)
	b1	1		NZ/INDNES(1)
	b2	1		AUSTRALIA(1)
	b3	1		E.EUROPE(1)
	b4	1		SPECIAL(1)
	b5	1		AMERICA(1)
	b6	1		CATV(1)
	b7	1		JAPAN(1)
option3		00		
0E2	b0	1	A2 enable	4.5(1)
	b1	1		5.5(1)
	b2	1		6.0(1)
	b3	1	NICAM enable	6.5(1)
	b4	0		4.5(1)
	b5	0		5.5(1)
	b6	0		6.0(1)
	b7	0		6.5(1)
option4		00		
0E3	b0	0	A2 select 6.5MHz	5.742MHz(0) 6.742MHz(1)
	b1	1	NICAM priority	ASIA/M.E.(1)
	b2	0		HK/UK(1)
	b3	0		CHINA(1)
	b4	0		NZ/INDONESIA(1)
	b5	1		AUSTRALIA(1)
	b6	1		E.EUROPE(1)
	b7	1		SPECIAL(1)
option5		00		
0E4	b0	0	Virtual Dolby Surround	enable(1)
	b1	1	NICAM C4 bit	enable(1)
	b2	1	Noise mute	Noise mute enable(1)
	b3	1	Monitor out AV1 mute	Monitor out AV1 mute(1)
	b4	1	SIF	4.5(1)

	b5	1		5.5(1)
	b6	1		6.0(1)
	b7	1		6.5(1)

Options Model		Description		
option6		00		
0E5	b0	1	Reserved	Geomagnetic Enable (1)
	b1	0	Geomagnetic Sensor	Geomagnetic sensor enable (1)
	b2	0	Geomagnetic Polarity	Geomagnetic polarity Plus+(0), Minus-(1)
	b3	0	P.NR.	Enable(1)
	b4	1	SASO enable	SASO enable(1)
	b5	0	Search speed	Slow(1) Fast(0)
	b6	1	VCR/GAME in search	On(0) Off(1)
	b7	0	Tuner	MACO tuner (0), ALPS tuner (1)
option7		00		
0E6	b0	0	TEXT	enable(1)
	b1	1	TEXT TOP	TOP enable (1)
	b2	1	TEXT language	English(1)
	b3	1		Cyrillic(1)
	b4	1		E.Europe 1(1)
	b5	0		E.Europe 2(1)
	b6	1		Arabic(1)
	b7	0		
option8		00		
0E7	b0	1	VGA	enable(1)
	b1	1	Reserved	1080i Enable(1)
	b2	0	Reserved	ID-1 Enable(1)
	b3	0	Australia	enable(1)
	b4	1	OSD language	ARABIC(1)
	b5	0		RUSSIAN(1)
	b6	1		CHINESE(1)
	b7	0	free	
option9		00		
0E8	b0	1	Panasonic LOGO	Display(1)
	b1	1	MPX status	Display(1)
	b2	0	Scan mode AUTO for P-NTSC	Progressive2(0), Progressive(1)
	b3	0	free	
	b4	0	free	
	b5	0	free	
	b6	1	X-ray protection	Enable(1)
	b7	1	5V detect protection	Enable(1)

option10		00		
0E9	b0	1	free	enable(1)
	b1	1	OSD language	enable(1)
	b2	1		Noise mute enable(1)
	b3	1		Monitor out AV1 mute(1)
	b4	1	free	4.5(1)
	b5	1	free	5.5(1)
	b6	1	free	6.0(1)
	b7	1	Protect 5V detect	6.5(1)

Options Model		Description		
option11		4E		
0EA	b0	0	Shop mode	enable(1)
	b1	1	Full/16.9 display	Reserved
	b2	1	Sub Headphone	enable(1)
	b3	1	Scan mode Blanking	Blanking enable(1)
	b4	0	User aspect 14:9	enable(1)
	b5	0	NICAM C4 bit	enable(1)
	b6	1	ID-1	enable(1)
	b7	0	1080i	enable(1)
option12		41		
0EB	b0	1	Asia	Asia(1), Europe(0)
	b1	0		
	b2	0	Ireland	not use
	b3	0	UK	not use
	b4	0		
	b5	0		(Reserved for 29 inch etc.)
	b6	1	Large size	52(1) / 42(0) for PTV, 36(1) / 32(0) for wide, 34(1 for 4:3
	b7	0	PTV	PTV (1)
option13		7A	Temporary	
0EC	b0	0	VDU Version	A21 (0), A12 (1)
	b1	1	GC Version	ES5(0), ES6(1)
	b2	0	UV Swap	Swap(1)
	b3	1	TEXT	Enable(1)
	b4	1	Main GC ES7	ES7(1), ES5/6(0)
	b5	1	Sub GC ES7v	ES7(1), ES5/6(0)
	b6	1		
	b7	0	CIP2	without CIP1(0), with CIP1(1)

5. ADJUSTMENT PROCEDURE

5.1. VOLTAGE CONFIRMATION

Item/Preparation	Adjustment Procedure
1. +B voltage	1. TPA55: 144.8 ± 1V 2. TPA56: 12 ± 1V 3. TPA57: 9 ± 1V 4. TPA: 2.5 ± 0.25V

5.2. E.H.T CHECK

Item/Preparation	Adjustment Procedure
1. Receive an RF signal, window or crosshatch pattern. 2. Set the Brightness and Contrast to minimum (0 Beam) 3. Connect the High Voltage Voltmeter to the CRT ANODE CAP. 4. The set should be switched to AV (no input) contrast and brightness minimum.	1. Check the EHT voltage is (32.0 ± 1.0) kV. 2. Switch from AV mode to TV. 3. With the Brightness and the contrast controls MAX, check th voltage does not drop more than 3.0 kV from the above measu with R.F. signal.

5.3. SUB CONTRAST

Item/Preparation	Adjustment Procedure
1. Receive PAL colour bar pattern 2. Connect oscilloscope to A51 pin 48. 3. Set controls: / BRT.....CENTER / COLOUR.....CENTER / CONTRAST....MAX / AI.....OFF	1. Adjust Sub Contrast (Service 1): / A = 3.85 ± 0.1V **Fig. 1** 2. Adjust Video gain 2 (Service 1) so that Sub picture level B be same as Main picture level A. **Fig. 2**

5.4. SUB TINT

Item/Preparation	Adjustment Procedure
1. Receive a 3.58 MHz NTSC rainbow pattern 2. Connect oscilloscope to A51 pin 50. 3. Set controls: / BRT.....CENTER / COLOUR.....CENTER / CONTRAST....MAX / NTSC TINT.....CENTER / AI.....OFF	1. Adjust Sub NTSC Tint so that the peak of level of waveform Fig. 3 **Fig. 3** 2. Receive the Rainbow pattern (3.58 MHz NTSC) on both of Ma pictures. 3. Adjust Sub NTSC Tint 2 so that the peak of level of waveforn to Fig. 4. **Fig. 4**

5.5. SUB COLOUR

Item/Preparation	Adjustment Procedure
1. Receive a 3.58 MHz NTSC rainbow pattern 2. Connect oscilloscope to A51 pin 48. 3. Set controls: / BRT.....CENTER / COLOUR.....CENTER / CONTRAST....MAX / AI.....OFF	1. Adjust Sub Colour: / A = 3.3 ± 0.5V **Fig. 5**

5.6. VRS ADJUSTMENT

1. PREPARATION

A. Set DY to CRT not to tilt up and down and left and right deflection. (Fig. 1)

B. Set CY to CRT and set CY magnet primarily. / Pur Mg: Set Pur Mg that 2 magnets are vertical position. / VRS Mg: Set VRS Mg that 2 magnets are side position.

C. Set geomagnetic correction DAC [0].

2. ADJUSTMENT

A. Receive the white balance pattern.

B. Adjust V-CENTER.

C. Set R,B CUT OFF to minimum (0) and set G CUT OFF to center (511).

D. Receive the aging pattern.

E. Set 2 magnets of vertical position to up and down equally so that center part of CRT. (Fig. 3)

Fig. 1

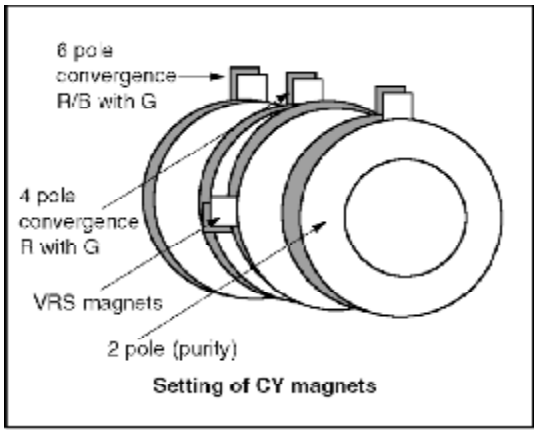


Fig. 2

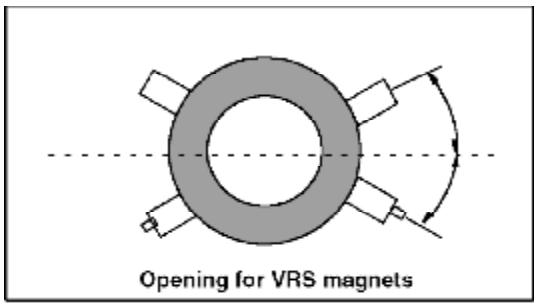
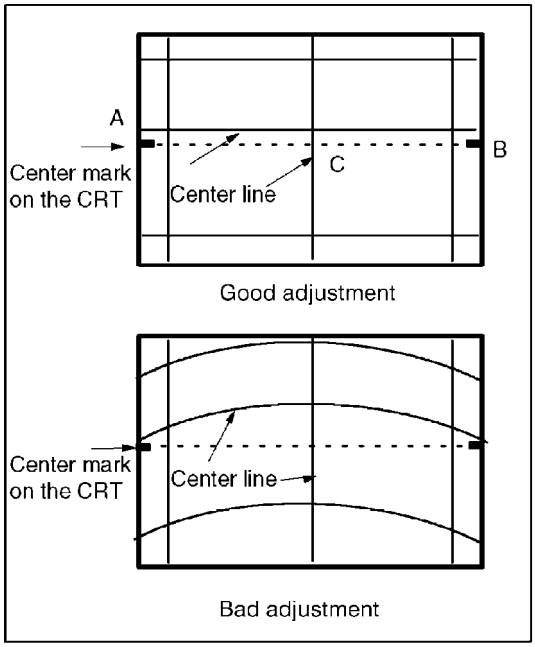
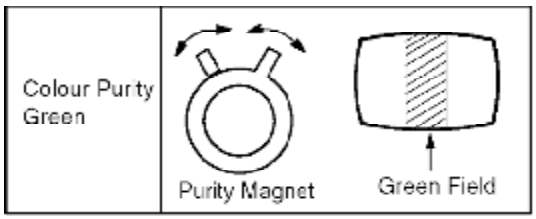


Fig. 3

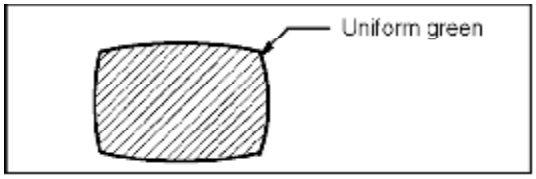


5.7. COLOUR PURITY

1. **Operate the TV set for over 60 minutes.**
2. **Receive a purity pattern signal. (white pattern)**
3. **Set Bright and Contrast controls to their maximum positions.**
4. **Set V-POS to 63 DAC.**
5. **Adjust roughly the static convergence magnets.**
6. **Fully degauss the picture tube using an external degaussing coil.**
7. **Loosen a clamp screw for the deflection yoke and move the deflection yoke as close to the purity magnet as possible.**
8. **Adjust the purity magnet so that a vertical green field is obtained at the center of the screen.**

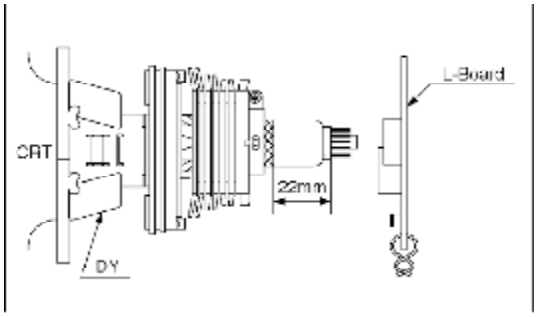


9. **Slowly press the deflection yoke and set it where a uniform green field is obtained.**



10. Adjust roughly the Low Light controls and make sure that a uniform white field is obtained.

11. Tighten the clamp screw.



5.8. CONVERGENCE

1. INSTRUMENT

A. Helmhortz device

2. PREPARATION

A. Set the Helmhortz device to local magnetic field. / Horizontal: 0 ± 0.03 x10^{-4} T

B. Receive the cross hatch pattern.

C. Picture menu: DYNAMIC Normal and adjust BRIGHT DAC until gray portion of cross hatch.

D. Set DY to CRT not to tilt (up and down and left and right).

3. ADJUSTMENT

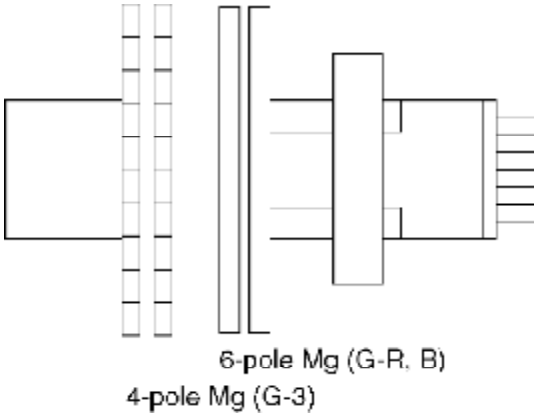
A. Static convergence Adjustment

a. Make sure that magnets are positioned shown in Fig. 1.

b. Adjust 4-pole magnets (Fig. 1) to align center dots of R and B and adjust 6-pole magnets to align center dots to G.

c. After adjustment, secure magnets with magnet lock of white lacquer. / *Beams move with rotating when static magnets are turned. / Rotational reduce of beams differs by angle of two magnets. / Therefore, repeat magnet adjustmentsseveral times so that all are aligned completely.

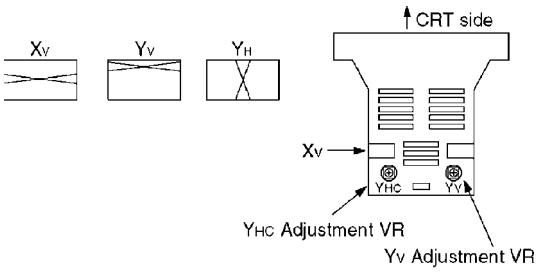
Fig. 1



B. YHC, YV, XV, Adjustment (Fig. 2)

a. Adjust so that Static and Dynamic convergence is best with YHC, VR, YV and XV coil. / In case of static convergence is tilted, repeat (1) Static convergence Adjustment.

Fig. 2



C. Dynamic convergence Adjustment

a. When dynamic convergence is bad, fixing permalloy between neck and DY so that dynamic convergence is best.

4. Confirm that left upper side line is straight. / When left upper side line isn't straight, put magnet on DY and adjust the left upper side line to straight.

5.9. CUT OFF

Preparation

1. Receive a colour bar signal with colour "OFF" and operate the TV set more than 15 minutes.

2. Set the picture menu to "DYNAMIC NORMAL" and the AI to off.

3. Connect an oscilloscope to TPL7 with DC mode.

4. Set the TV set to Service Mode 1.

5. Screen VR: Min.

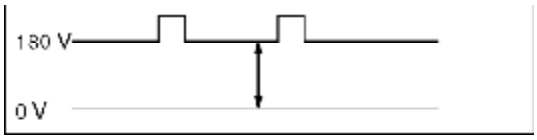
6. Set the data level of SUB BRIGHT, R, G, B-CUTOFF and R, G, B-

DRIVE to the table values.

Display	Data Level
R High (R-CUT OFF)	256
G High (G-CUT OFF)	512
B High (B-CUT OFF)	256
R Low (R-DRIVE)	128
G Low (G-DRIVE)	128
B Low (B-DRIVE)	128
SUB BRIGHT	136

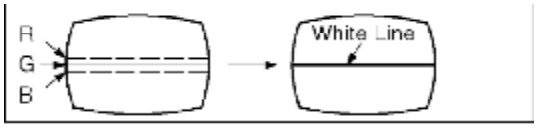
Adjustment

1. **Select G-CUTOFF adjustment mode and collapse vertical scan.**
2. **Adjust G-CUTOFF control to become the DC = 0V to video level at 180V as shown below.**



3. **Slowly turn the screen control clockwise until a green colour horizontal line appears on the picture tube. This is the setting point for the screen control. / Note that do not adjust the G-CUTOFF setting in the following procedure.**

4. **Adjust the remained R and B-CUTOFF controls so as to get a white horizontal line on the screen.**



5. **Return to full field SCAN by pushing the position 5 key on the remote control.**
6. **Adjust the R-Drive and B-Drive controls as to obtain uniform white on the white bar of the greyscale pattern.**
7. **Confirm correct B/W rendition and greyscale tracking or repeat CUTOFF and drive control setup. / Note: / Write down the original value for each address**
   adjusment before adjusting anything.

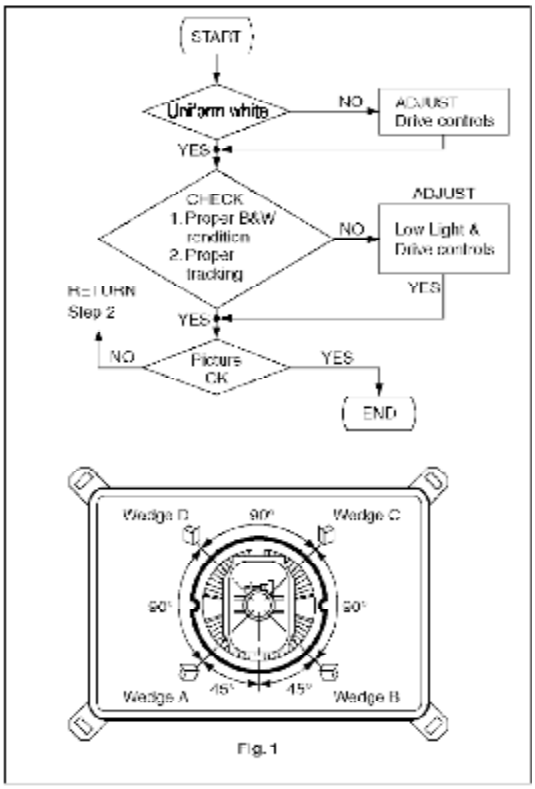


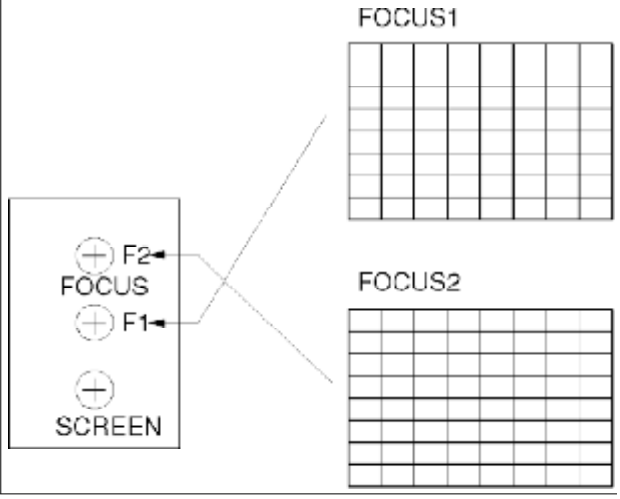
Fig. 1

8. **Wedge A shown in Fig. 1 should be fixed within a range of 45° to the left of the vertical line as shown.**
9. **After inserting wedge A, insert wedges B, C and D. / The wedges should be set 90° apart from each other.**
10. **Be certain that the four wedges are firmly fixed and the deflection yoke is tightly clamped in place otherwise the deflection yoke may shift its position and cause a loss of convergence and purity.**

5.10. WHITE BALANCE

Item/Preparation	Adjustment Procedure
1. Select Service Mode 1. 2. Aging should have been performed over 30 minutes 3. Receive the white balance pattern. 4. Picture menu: DYNAMIC NORMAL / AI: OFF 5. Degauss the CRT face. 6. Connect the photo sensors of the Colour Analyser to the CRT. / Note: / CRT cut off adjustment is completed.	1. Adjustment of Low Light A. Adjustment SUB BRIGHT, so that “Y” axis indicates 6.5 B. Adjustment R-CUT OFF, so that y axis indicates 0.248. C. Adjustment B-CUT OFF, so that x axis indicates 0.247. 2. Adjustment of High Light A. Adjust SUB BRIGHT, so that “Y” axis indicates 150. B. Adjust R-DRIVE, so that y axis indicates 0.264. C. Adjust B-DRIVE, so that x axis indicates 0.258.

5.11. FOCUS

Item/Preparation	Adjustment Procedure
1. Receive a cross-hatch pattern signal.	1. Adjust the Focus to thin all the Lines by Focus 1 Control. / (Prefer to thin the Vertical Lines than Horizontal Line.) 2. Adjust the Focus to thin the Horizontal Lines by Focus 2 Control. 

5.12. GEOMAGNETIC

Item/Preparation	Adjustment Procedure
1. Demagnetize the GM-Board around its perimeter with the Demagnetizer. 2. Set to control: / Geomagnetic.....Auto	1. Connect a DC voltage meter to TPGM1-2pin (GM-Board) 2. Adjust the R4863 (GM-Board) so that the Vx Out at TPGM1-2pin becomes 4.9 ± 0.05 V 3. Connect a DC voltage meter to TPGM1-1pin (GM Board). 4. Adjust the R4861 (GM-Board) so that the Vy Out at TPGM1-1pin becomes 4.9 ± 0.05 V

5.13. SUB BRIGHT

Item/Preparation	Adjustment Procedure
1. Receive the sub bright pattern. 2. Picture Menu: / BRT.....CENTER / COLOUR.....CENTER / CONT.....MAX 3. Connect the photo sensor of the Colour Analyser to the center of the CRT.	1. Adjust Sub Bright so that brightness level becomes 1 ± 0.2 cd/m^2.

6. DEFLECTION ADJUSTMENT

6.1. V-ADJUSTMENT / / CONFIRMATION (4:3 MODE)

6.1.1. V-CENTER ADJUSTMENT (4:3 MODE)

6.1.1.1. 100i V-POS ADJUSTMENT

1. Receive PAL monoscope pattern.
2. Set scan mode to 100Hz by remote control key.
3. Adjust V-POS (100i / 4:3) so that the scale of the top and bottom side is equal.

6.1.1.2. 120i V-POS ADJUSTMENT

1. Receive NTSC monoscope pattern.
2. Set scan mode to 100Hz by remote control key.
3. Adjust V-POS (120i / 4:3) so that the scale of the top and bottom side is equal.

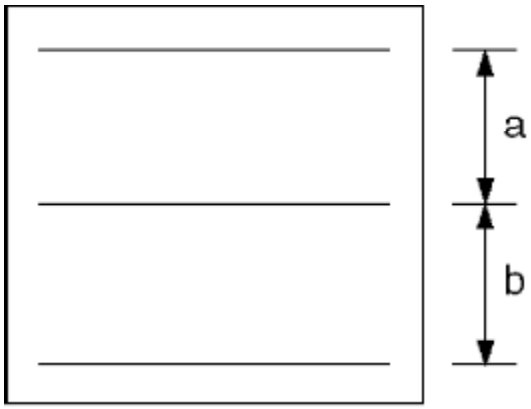
6.1.1.3. 50p V-POS ADJUSTMENT

1. Receive PAL monoscope pattern.
2. Set scan mode to progressive by remote control key.
3. Adjust V-POS (50p / 4:3) so that the scale of the top and bottom side is equal.

6.1.1.4. 60p V-POS ADJUSTMENT

1. Receive NTSC monoscope pattern.
2. Set scan mode to progressive by remote control key.
3. Adjust V-POS (60p / 4:3) so that the scale of the top and bottom side is equal.

Fig. 1



6.1.2. V-HEIGHT ADJUSTMENT (4:3 MODE)

6.1.2.1. 100i V-AMP ADJUSTMENT

1. Receive PAL monoscope pattern.
2. Set scan mode to 100 Hz by remote control key.
3. Adjust V-AMP (100i / 4:3) so that B, D (Fig. 2) is 2.1 ± 0.1.

6.1.2.2. 120i V-AMP ADJUSTMENT

1. Receive NTSC monoscope pattern.
2. Set scan mode to 100 Hz by remote control key.

3. Adjust V-AMP (120i / 4:3) so that B, D (Fig. 2) is 2.1 ± 0.1.

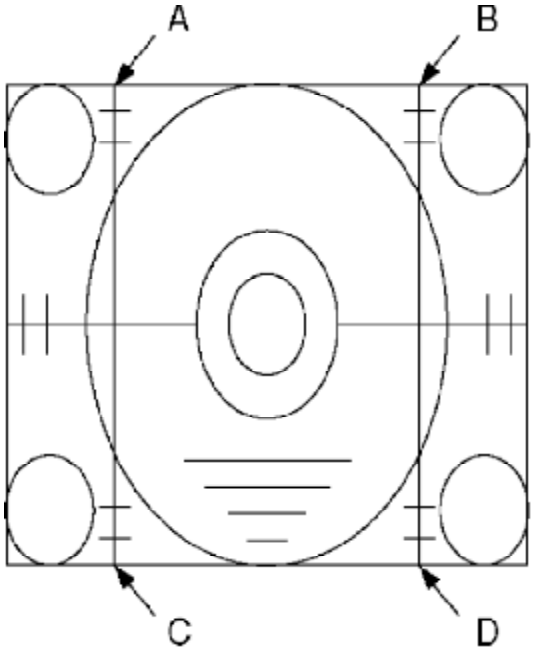
6.1.2.3. 50p V-AMP ADJUSTMENT

1. Receive PAL monoscope pattern.
2. Set scan mode to progressive by remote control key.
3. Adjust V-AMP (50p / 4:3) so that B, D (Fig. 2) is 2.1 ± 0.1.

6.1.2.4. 60p V-AMP ADJUSTMENT

1. Receive NTSC monoscope pattern.
2. Set scan mode to progressive by remote control key.
3. Adjust V-AMP (60p / 4:3) so that B, D (Fig. 2) is 2.1± 0.1.

Fig. 2



6.2. H-DEFLECTION CONFIRMATION / ADJUSTMENT (4:3 MODE)

6.2.1. H-CENTER ADJUSTMENT (4:3 MODE)

6.2.1.1. 100i H-POS ADJUSTMENT

1. Receive PAL monoscope pattern.
2. Set scan mode to 100 Hz by remote control key.
3. Adjust H-POS (100i / 4:3) so that the horizontal position is center of CRT.

6.2.1.2. 120i H-POS ADJUSTMENT

1. Receive NTSC monoscope pattern.

2. Set scan mode to 100 Hz by remote control key.
3. Adjust H-POS (120i / 4:3) so that the horizontal position is center of CRT.

6.2.2. H-WIDTH ADJUSTMENT (4:3 MODE)

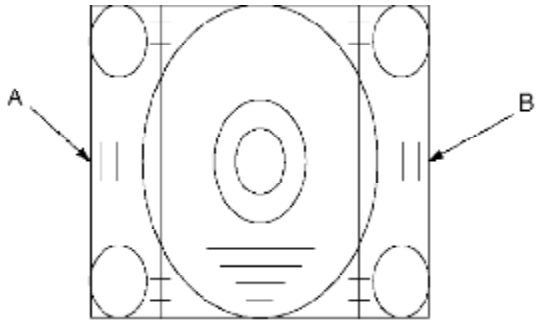
6.2.2.1. 100i H-AMP ADJUSTMENT

1. Receive PAL monoscope pattern.
2. Set scan mode to 100 Hz by remote control key.
3. Adjust H-AMP (100i / 4:3) so that both of the edges are within A, B = 2.5 ± 0.2.

6.2.2.2. 120i H-AMP ADJUSTMENT

1. Receive NTSC monoscope pattern.
2. Set scan mode to 100 Hz by remote control key.
3. Adjust H-AMP (120i / 4:3) so that both of the edges are within A, B = 2.5 ± 0.2.

Fig. 3



6.3. EW ADJUSTMENT / CONFIRMATION (4:3 MODE)

6.3.1. 100i SIDE EW ADJUSTMENT (4:3 MODE)

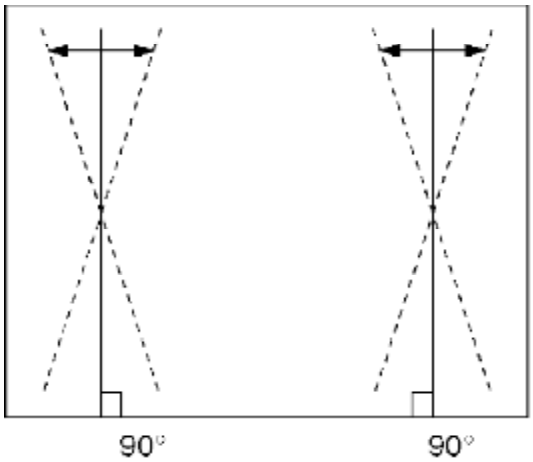
1. Receive PAL cross-hatch pattern.
2. Set scan mode to 100 Hz by remote control key.
3. Adjust the vertical line to straight by Parabola (100i / 4:3).
4. Adjust the vertical line to straight line of both sides vertical line in Fig. 4 by Trapezoid (100i / 4:3).
5. Confirm there is no H-parallel distortion. / If there is distortion, adjust by H-Parallel (100i / 4:3). / In that case, repeat 4 and 5 so that there is no trapezoid / parallel distortion.

6. Confirmation EW of the corner side. / If need, adjust Top-Corner (100i / 4:3) and Bottom Corner (100i / 4:3).
7. Confirm bow level of the both side. / If it is not symmetrical, adjust C-Correct (100i / 4:3).

6.3.2. 120i EW ADJUSTMENT (4:3 MODE)

1. Receive NTSC cross-hatch pattern.
2. Set scan mode to 100 Hz by remote control key.
3. Adjust the vertical line to straight by Parabola (120i / 4:3).
4. Adjust the vertical line to straight line of both sides vertical line in Fig. 4 by Trapezoid (120i / 4:3).
5. Confirm there is no H-parallel distortion. / If there is distortion, adjust by H-Parallel (120i / 4:3). / In that case, repeat 4 and 5 so that there is no trapezoid / parallel distortion.
6. Confirmation EW of the corner side. / If need, adjust Top-Corner (120i / 4:3) and Bottom Corner (120i / 4:3).
7. Confirm bow level of the both side. / If it is not symmetrical, adjust C-Correct (120i / 4:3).

Fig. 4



6.3.3. 50p EW ADJUSTMENT (4:3 MODE)

1. Receive PAL cross-hatch pattern.
2. Set scan mode to progressive by remote control key.
3. Adjust the vertical line to straight by Parabola (50p / 4:3).
4. Adjust the vertical line to straight line of both sides vertical line in

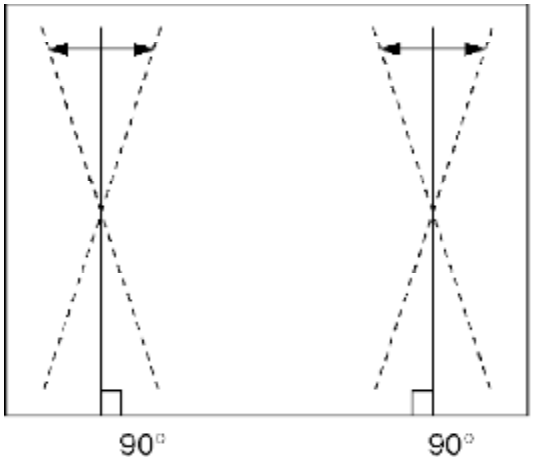
Fig. 5 by Trapezoid (50p / 4:3).

5. Confirm there is no H-parallel distortion. / If there is distortion, adjust by H-Parallel (50p / 4:3). / In that case, repeat 4 and 5 so that there is no trapezoid / parallel distortion.
6. Confirmation EW of the corner side. / If need, adjust Top-Corner (50p / 4:3) and Bottom Corner (50p / 4:3).
7. Confirm bow level of the both side. / If it is not symmetrical, adjust C-Correct (50p / 4:3).

6.3.4. 60p SIDE PINCUSSION ADJUSTMENT (4:3 MODE)

1. Receive NTSC cross-hatch pattern.
2. Set scan mode to progressive by remote control key.
3. Adjust the vertical line to straight by Parabola (60p / 4:3).
4. Adjust the vertical line to straight line of both sides vertical line in Fig. 5 by Trapezoid (60p / 4:3).
5. Confirm there is no H-parallel distortion. / If there is distortion, adjust by H-Parallel (60p / 4:3). / In that case, repeat 4 and 5 so that there is no trapezoid / parallel distortion.
6. Confirmation EW of the corner side. / If need, adjust Top-Corner (60p / 4:3) and Bottom Corner (60p / 4:3).
7. Confirm bow level of the both side. / If it is not symmetrical, adjust C-Correct (60p / 4:3).

Fig. 5



6.4. V LINIALITY ADJUSTMENT / CONFIRMATION (4:3 MODE)

6.4.1. 100i V-Linear ADJUSTMENT

1. Receive PAL monoscope pattern.
2. Set scan mode to 100 Hz by remote control key.
3. Confirm V-linear (100i / 4:3) as to the balance of circle. / If needed, adjust V-linear (100i / 4:3).

6.4.2. 120i V-Linear ADJUSTMENT

1. Receive NTSC monoscope pattern.
2. Set scan mode to 100 Hz by remote control key.
3. Confirm V-linear (120i / 4:3) as to the balance of circle. / If needed, adjust V-linear (120i / 4:3).

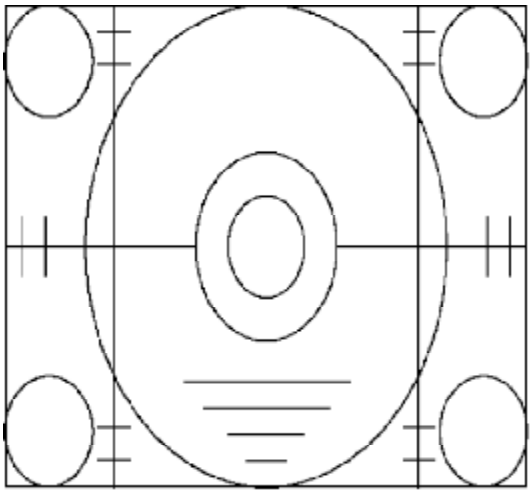
6.4.3. 50p V-Linear ADJUSTMENT

1. Receive PAL monoscope pattern.
2. Set scan mode to progressive by remote control key.
3. Confirm V-linear (50p / 4:3) as to the balance of circle. / If needed, adjust V-linear (50p / 4:3).

6.4.4. 60p V-Linear ADJUSTMENT

1. Receive NTSC monoscope pattern.
2. Set scan mode to progressive by remote control key.
3. Confirm V-linear (60p / 4:3) as to the balance of circle. / If needed, adjust V-linear (60p / 4:3).

Fig. 6



6.5. DEFLECTION (16:9 MODE) ADJUSTMENT / CONFIRMATION

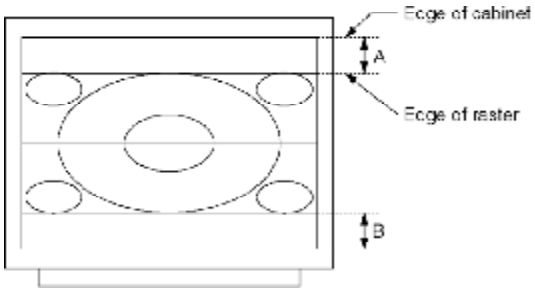
6.5.1. DATA SETTING (16:9)

1. Copy the adjusted data of 100i / 4:3 mode to 100i / 16:9 in the table 1 (Except H-POS, V-S-Correct).
2. Copy the adjusted data of 120i / 4:3 mode to 120i / 16:9 in the table 1 (Except H-POS, V-S-Correct).
3. Copy the adjusted data of 50p / 4:3 mode to 50p / 16:9 in the table 1 (Except H-POS, H-AMP, V-S-Correct, C-Correct) and copy the data of 100i / 4:3 to 50p / 16:9 about H-AMP and C-Correct.
4. Copy the adjusted data of 60p / 4:3 mode to 60p / 16:9 in the table 1 (Except H-POS, H-AMP, V-S-Correct, C-Correct) and copy the data of 120i / 4:3 to 60p / 16:9 about H-AMP and C-Correct.

6.5.2. V-AMP (16:9) ADJUSTMENT

1. Receive PAL monoscope pattern.
2. Set the aspect to 16:9
3. Set scan mode to 100 Hz
4. Confirm that A, B in Fig. 7 is 5.0 cm ± 1 cm. If not, adjust V-AMP (100i / 16:9).
5. Set scan mode to progressive.
6. Confirm that A, B in Fig. 7 is 5.0 cm ± 1 cm. If not, adjust V-AMP (50p / 16:9).
7. Receive NTSC monoscope pattern.
8. Set scan mode to 100 Hz.
9. Confirm that A, B in Fig. 7 is 5.0 cm ± 1 cm. If not, adjust V-AMP (120i / 16:9).
10. Set scan mode to progressive.
11. Confirm that A, B in Fig. 7 is 5.0 cm ± 1 cm. If not, adjust V-AMP (60p / 16:9).

Fig. 7



6.6. 525p DEFLECTION ADJUSTMENT / CONFIRMATION

6.6.1. V, H-HOLD CONFIRMATION

1. Receive 525p signal through Yuv input.
2. Confirm V, H-hold is normal.

6.6.2. H-CENTER (525p) CONFIRMATION / ADJUSTMENT

1. Receive 525p signal.
2. Copy the data of 00h to EEROM ADDRESS [333] (525p / H-POS).
3. Copy the data of F5h to EEROM ADDRESS [332] (525p / H-POS).
4. Confirm H-center and if needed, adjust H-POS (525p).

6.7. 625p DEFLECTION ADJUSTMENT

6.7.1. H-CENTER (625p) ADJUSTMENT

1. Receive 625p signal.
2. Copy the data of EEROM ADDRESS [332] (525p / H-POS) to EEROM ADDRESS [330] (625p / H-POS).
3. Copy the data of EEROM ADDRESS [333] (525p / H-POS) to EEROM ADDRESS [331] (625p / H-POS).

6.8. VGA480 / 60 Hz DEFLECTION ADJUSTMENT / CONFIRMATION

6.8.1. V-CENTER ADJUSTMENT

1. Adjust V-POS (VGA) so that center of the crosshatch pattern is center of the CRT.

6.8.2. V-HEIGHT ADJUSTMENT

1. Adjust V-AMP (VGA) so that A = B in Fig. 8.

6.8.3. H-CENTER ADJUSTMENT

1. Adjust H-POS (VGA) so that horizontal position is center of CRT.

6.8.4. H-WIDTH ADJUSTMENT

1. Adjust H-AMP (VGA) so that C = D in Fig. 8.

6.8.5. EW ADJUSTMENT

1. Adjust the vertical line to straight line by Parabola (VGA).
2. Adjust the vertical line to straight line of both side vertical line in Fig. 9 by Trapezoid (VGA).
3. Confirm there is no H-Parallel distortion. / If there is distortion, adjust by H-Parallel (VGA). / In that case, repeat 2 and 3 so that there is no trapezoid / parallel distortion.
4. Confirmation vertical pincushion of the corner side. / If needed, adjust Top-Corner (VGA) and Bottom-Corner (VGA).
5. Confirm bow level of the both side. / If it is not symmetrical, adjust C-Correct (VGA).
6. Set H-SIZE in the user control to NORMAL. / (No need, if SELF CHECK is done before shipping.)

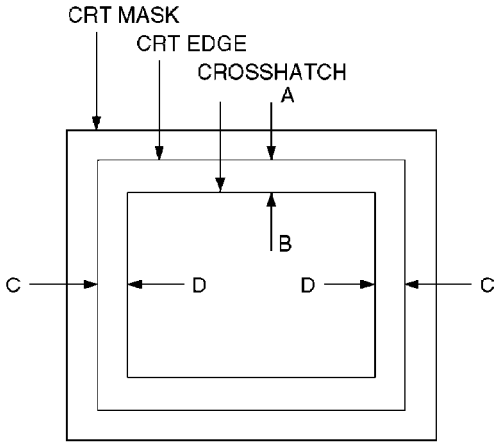


Fig. 8

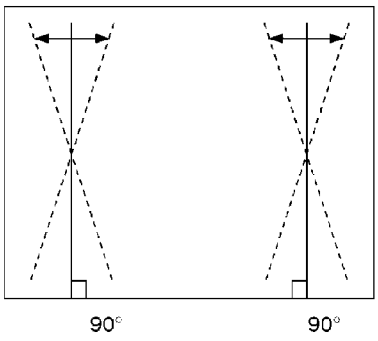


Fig. 9

6.9. VGA400 / 70 Hz DEFLECTION ADJUSTMENT / CONFIRMATION

6.9.1. V-CENTER ADJUSTMENT

1. Adjust V-POS (VGA 400) so that center of the crosshatch pattern is center of the CRT.

6.9.2. V-HEIGHT ADJUSTMENT

1. Adjust V-AMP (VGA 400) so that A = B in Fig. 10.
2. Add 10 dac to the above data and set to EEPROM [336].

6.9.3. V-LINEARITY CONFIRMATION / ADJUSTMENT

1. **Confirm V-linear as to the balance of the circle. / If needed, adjust V -linear (VGA 400).**

6.9.4. EW ADJUSTMENT

1. **Confirm the vertical line is straight line. / If needed, adjust the vertical line to straight line by Parabola (VGA 400).**
2. **Confirm both sides vertical line in Fig. 1 are straight line. / If needed, adjust the vertical line to straight line of both side vertical line in Fig. 11 by Trapezoid (VGA 400).**
3. **Set H-SIZE in the user control to NORMAL. / (No need, if SELF CHECK is done before shipping).**

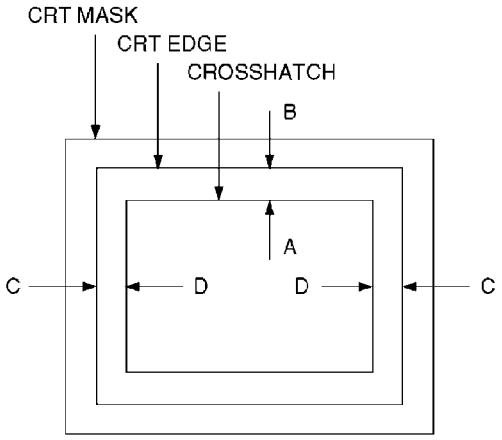


Fig. 10.

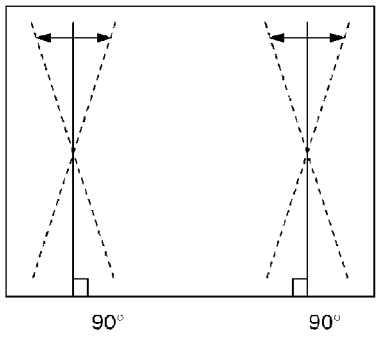


Fig. 11.

6.10. TABLE 1

mode	100i (PAL) (4:3)	100i (PAL) (16:9)	120i (NTSC) (4:3)	120i (NTSC) (16:9)	50p (PAL) (4:3)	50p (PAL) (16:9)	60p (NTSC) (4:3)	60p (NTSC) (16:9)	525p (YUV) 4:3	525p (YUV) 16:9	625p (YUV) 4:3	625p (YUV) 16:9	V(4: 6(
H-POS	ADJ D00	- -	- -	- -	- -	- -	- -	- -	ADJ D02	- -	COPY D01	- -	A D
V-POS	ADJ D10	COPY D10 D14	ADJ D11	COPY D11 D15	ADJ D12	COPY D12 D16	ADJ D13	COPY D13 D17	ADJ D19	- -	ADJ D18	- -	A D
H-AMP	ADJ D27	ADJ D2B	COPY D27 D28	COPY D2B D2C	COPY D27 D29	COPY D2B D2D	COPY D27 D2A	COPY D2B D2E	ADJ D30	- -	ADJ D2F	- -	A D
V-AMP	ADJ D3E	ADJ D42	ADJ D3F	ADJ D43	ADJ D40	ADJ D44	ADJ D41	ADJ D45	ADJ D47	- -	COPY D46	- -	A D
V-BLK	ADJ D55	ADJ D59	COPY D55 D56	COPY D59 D5A	COPY D55 D57	COPY D59 D5B	COPY D55 D58	COPY D59 D5C	ADJ D5E	- -	ADJ D5D	- -	A D
Parabola	ADJ D6C	ADJ D70	COPY D6C D6D	COPY D70 D71	COPY D6C D6E	COPY D70 D72	COPY D6C D6F	COPY D70 D73	ADJ D75	- -	ADJ D74	- -	A D
Trapezoid	ADJ D83	ADJ D87	ADJ D84	ADJ D88	ADJ D85	ADJ D89	ADJ D86	ADJ D8A	ADJ D8C	- -	COPY D8B	- -	A D
V-Linear	ADJ D9A	COPY D9A D9E	ADJ D9B	COPY D9B D9F	ADJ D9C	COPY D9C DA0	ADJ D9D	COPY D9D DA1	ADJ DA3	- -	ADJ DA2	- -	A D
Top -Corner	ADJ DB1	ADJ DB5	ADJ DB2	ADJ DB6	ADJ DB3	ADJ DB7	ADJ DB4	ADJ DB8	ADJ DBA	- -	ADJ DB9	- -	A D
Bottom -Corner	ADJ DC8	ADJ DCC	ADJ DC9	ADJ DCD	ADJ DCA	ADJ DCE	ADJ DCB	ADJ DCF	ADJ DD1	- -	ADJ DD0	- -	A D
V-S - Correct	FIX (2B) DDF	FIX (19) DE3	FIX (22) DE0	FIX (20) DE4	FIX (2C) DE1	FIX (1E) DE5	FIX (31) DE2	FIX (20) DE6	FIX (2E) DE8	- -	FIX (2D) DE7	- -	F (2 D

[].....EEPOM ADDRESS

7. CONDUCTOR VIEWS

7.1. A-Board 1 / 2

7.2. A-Board 2 / 2

8. SCHEMATIC DIAGRAMS

8.1. SCHEMATIC DIAGRAM NOTES

Important Safety Notice

Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

Notes:

1. **Resistor**
   All resistors are carbon 1/4W resistor, unless marked as follows:
   Unit of resistance is OHM [Ω] (K=1,000, M=1,000,000).
   ◯ : Nonflammable ⊠ : Metal Oxide
   △ : Solid ◎ : Metal Film
   ◪ : Wire Wound ⊗ : Fuse:
2. **Capacitor**
   All capacitors are ceramic 50V capacitor, unless marked as follows:
   Unit of capacitance is μF, unless otherwise noted.
   ⊗ : Temperature Compensation : Electrolytic
   Ⓜ : Polyester NP : Bipolar
   ⓜ : Metalized Polyester Ⓣ : Dipped Tantalum
   ⊠ : Polypropylene Ⓩ : Z-Type
3. Coil
   Unit of inductance is μF, unless otherwise noted.
4. Test Point
   ⚲ : Test Point position
5. Earth Symbol
   ⏚ : Chassis Earth (Cold) : Line Earth (Hot)
6. Voltage Measurement
   Voltage is measured by a DC voltmeter.
   Conditions of the measurement are the following:
   Power Source ..... AC 110-240V, 50/60 Hz
   Receiving Signal ..... Colour Bar signal (RF)
   All customer's controls ..... Maximum positions
7. Number in red circle indicates waveform number.
   (See waveform pattern table.)
8. When arrow mark (↗) is found, connection is easily found from the direction of arrow
9. Indicates the major signal flow. ➡ : Video ⇨ : Audio
10. This schematic diagram is the latest at the time of printing and subject to change without notice.

Remarks:

1. The Power Circuit contains a circuit area which uses a separate power supply to isolate the earth connection.
   The circuit is defined by HOT and COLD indications in the schematic diagram. Take the following precautions.
   All circuits, except the Power Circuit, are cold.
   Precautions
   a. Do not touch the hot part or the hot and cold parts at the same time or you may be shocked.
   b. Do not short- circuit the hot and cold circuits or a fuse may blow and parts may break.
   c. Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously or a fuse may blow.
      Connect the earth of instruments to the earth connection of the circuit being measured.
   d. Make sure to disconnect the power plug before removing the chassis.
2. Following diodes are interchangeable.
   MA150- MA162 (Replacement part)

8.2. GM BOARD

8.2.1. GM BOARD 1 / 2

8.2.2. GM BOARD 2 / 2

8.3. G BOARD

8.3.1. G BOARD 1 / 2

8.3.2. G BOARD 2 / 2

8.4. X BOARD

8.4.1. X BOARD 1 / 2

8.4.2. X BOARD 2 / 2

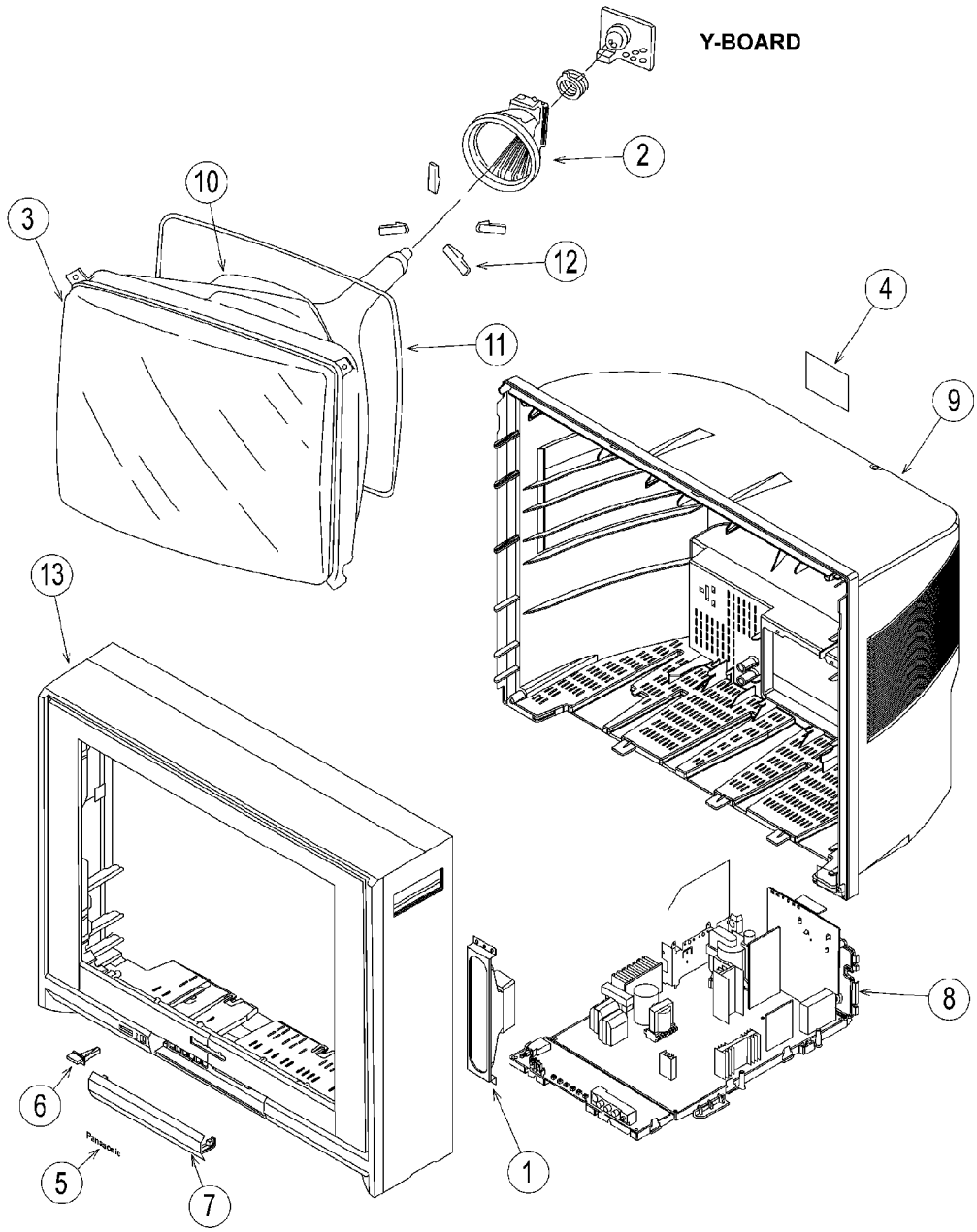
8.5. DG BOARD

8.5.1. DG BOARD 1 / 4

8.5.2. DG BOARD 2 / 4
8.5.3. DG BOARD 3 / 4
8.5.4. DG BOARD 4 / 4
8.6. DG2 BOARD
8.6.1. DG2 BOARD 1 / 2
8.6.2. DG2 BOARD 2 / 2
8.7. L BOARD
8.7.1. L BOARD 1 / 2
8.7.2. L BOARD 2 / 2
8.8. P BOARD
8.8.1. P BOARD 1 / 1
8.9. H BOARD
8.9.1. H BOARD 1 / 2
8.9.2. H BOARD 2 / 2
8.10. A BOARD
8.10.1. A BOARD 1 / 4
8.10.2. A BOARD 2 / 4
8.10.3. A BOARD 3 / 4
8.10.4. A BOARD 4 / 4
9. PARTS LOCATION

PARTS LOCATION

Note: The number on mechanical parts indicates Ref. No. of Replacement Parts List.



10. Replacement Parts List

10.1. Replacement Parts List Notes

Important Safety Notice
Components identified by ▲ mark have special characteristics important for safety. When replacing any of these components, use manufacturer's specified parts.

Note: Printed circuit board assembly with "NLA" is no longer available after production discontinuation of the complete set.
Abbreviation of part name and description

1. Resistor
Example:

ERD25TJ104 C 100KΩ, J, 1/4W
Type Allowance

Type	Allowance
C: Carbon	F: ±1%
F: Fuse	G: ±2%
M: Metal Oxide Metal Film	J: ±5% K: ±10%
S: Solid	M: ±20%
W: Wire Wound	

2. Capacitor

Example:
ECKF1H103ZF C 0.01UF, Z, 50V
Type Allowance

Type	Allowance
C: Carbon	C: ±0.25pF
E: Electrolytic	D: ±0.5pF
P: Polyester Polypropylene	F: ±1pF G: ±3%
T: Tantalum	J: ±5%
	K: ±10%
	L: ±15%
	M: ±20%
	P: +100% -0%
	Z: +80% -20%

10.2. Replacement Part List

Ref. No.	Part No.	Part Name & Description	Remarks
1	EASG15S509A2	SPEAKER	
	EUR511047	REMOTE CONTROL	
	J0KG00000088	CORE CLAMPER	
2	KDY4UHE05F	DEFLECTION YOKE	⚠
	KRCBC160928B	CORE CLAMPER	
3	M68LUQ085XTL	PICTURE TUBE	⚠
4	TBM4G0936	MODEL NAME PLATE	⚠
5	TBM4G3011	PANASONIC BADGE	
6	TBX4G89111	POWER BUTTON	
	TES4G406	COIL SPRING	
	THT4G1011R	CRT SCREW	
	TJB1726400	75OHM ADAPTOR	
7	TKP4G12881-1	DOOR	
8	TKP4G12931	REAR AV BRACKET	
9	TKU4GA0510-1	BACK COVER	
10	TLK4G9041	ROTATION COIL	⚠
11	TLK4G9076T	DEGAUSSING COIL	⚠
	TMM4G502	RUBBER WASHER	
12	TMM4G503	RUBBER WEDGE	
NLA	TNP4G118AZ	GM BOARD	⚠
NLA	TNP4G171AC	G BOARD	⚠
NLA	TNP4G181AG	X BOARD	⚠
NLA	TNP4G189BE	DG BOARD	⚠
NLA	TNP4G203AA	DG2 BOARD	⚠
NLA	TNP4G217AF	L BOARD	⚠
NLA	TNP4G235AE	P BOARD	⚠

Ref. No.	Part No.	Part Name & Description	Remarks
NLA	TNP4G289AA	H BOARD	⚠
NLA	TNP4G290AB	A BOARD	⚠
	TPD4G1111-1	TOP CUSHION (REAR)	
	TPD4G2099	CUSHION (BOTTOM)	
	TPE4G14023	SET COVER	
	TPE4G14024	TOP COVER	
	TQB4G3515	FAN BAG	
	TSM10032-3	MAGNET	
	TSN63115-4	PURITY MAGNET	
	TSPX4G002	SUB WOOFER BOX	
	TSX4G168H	AC POWER CORD	⚠
13	TXFKY02AH01	CABINET ASSY	
	TXFPC01AH01	CARTON	
	TXFPD01AS05	CUSHION (TOP)	
	RESISTORS		
R101	ERJ3GEY0R00	M 0OHM,J,1/16W	
R106	ERJ3GEYJ100	M 10OHM,J,1/16W	
R107	ERG3ANJ153	M 15KOHM,J, 3W	
R110	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R115	ERJ3GEY0R00	M 0OHM,J,1/16W	
R120	ERJ3GEYJ683	M 68KOHM,J,1/16W	
R121	ERJ3GEYJ683	M 68KOHM,J,1/16W	
R351	ERJ3GEYJ271	M 270OHM,J,1/16W	
R352	ERJ3EKF1801	M 1.8KOHM,F,1/16W	
R353	ERJ3EKF1401	M 1.4KOHM,F,1/16W	
R354	ERG3FJ823H	M 82KOHM,J, 3W	
R355	ERJ3GEY0R00	M 0OHM,J,1/16W	
R356	ERJ3GEYJ822	M 8.2KOHM,J,1/16W	
R357	ERC12GK561	S 560OHM,K, 1/2W	
R360	ERJ3GEYJ221	M 220OHM,J,1/16W	
R361	ERJ3EKF1801	M 1.8KOHM,F,1/16W	
R362	ERG3FJ823H	M 82KOHM,J, 3W	
R363	ERJ3EKF1401	M 1.4KOHM,F,1/16W	
R364	ERJ3GEY0R00	M 0OHM,J,1/16W	
R365	ERJ3GEYJ682	M 6.8KOHM,J,1/16W	
R366	ERC12GK561	S 560OHM,K, 1/2W	
R520	ERDS2TJ153	C 15KOHM,J, 1/4W	
R521	ERDS2TJ153	C 15KOHM,J, 1/4W	
R522	ERDS2TJ682	C 6.8KOHM,J, 1/4W	
R523	ERDS2TJ471	C 470OHM,J, 1/4W	
R524	ERDS2TJ182	C 1.8KOHM,J, 1/4W	
R525	ERDS2TJ104	C 100KOHM,J, 1/4W	
R526	ERJ3EKF2202	M 22KOHM,F,1/16W	
R527	ERJ3GEY0R00	M 0OHM,J,1/16W	
R528	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R529	ERJ3GEYJ223	M 22KOHM,J,1/16W	
R530	ERG3FJ222H	M 2.2KOHM,J, 3W	
R531	ERDS2TJ222	C 2.2KOHM,J, 1/4W	
R532	ERDS2TJ222	C 2.2KOHM,J, 1/4W	
R533	ERDS2TJ153	C 15KOHM,J, 1/4W	
R534	ERDS2TJ272	C 2.7KOHM,J, 1/4W	
R535	D0AE912JA046	C 9.1KOHM,J, 1/4W	
R536	ERDS2TJ274	C 270KOHM,J, 1/4W	

Ref. No.	Part No.	Part Name & Description	Remarks
R537	ER0S2CKF1002	M 10KOHM,F, 1/4W	
R538	ERDS2TJ222	C 2.2KOHM,J, 1/4W	
R539	ERDS2TJ104	C 100KOHM,J, 1/4W	
R540	ERDS2TJ223	C 22KOHM,J, 1/4W	
R541	ERDS2TJ101	C 100OHM,J, 1/4W	
R542	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R543	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R544	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R545	ERDS2TJ104	C 100KOHM,J, 1/4W	
R546	ERDS2TJ271	C 270OHM,J, 1/4W	
R547	ERX3FJ1R0H	M 1OHM,J, 3W	
R549	ERG1FJS561D	M 560OHM,J, 1W	
R551	ERF2AKR18	W 0.18OHM,K, 2W	
R555	ER050CKF2802	M 28KOHM,F, 1/2W	
R556	ER0S2CHF2872	M28.7KOHM,F, 1/4W	
R557	ER0S2CHF4702	M 47KOHM,F, 1/4W	
R558	ER0S2CHF1502	M 15KOHM,F, 1/4W	
R559	ER0S2CHF3902	M 39KOHM,F, 1/4W	
R565	ERDS2TJ103	C 10KOHM,J, 1/4W	
R566	ERDS2TJ334	C 330KOHM,J, 1/4W	
R567	ERDS2TJ223	C 22KOHM,J, 1/4W	
R568	ERDS2TJ154	C 150KOHM,J, 1/4W	
R569	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	
R575	ERJ3GEYJ221	M 220OHM,J,1/16W	
R576	ERJ3GEYJ391	M 390OHM,J,1/16W	
R577	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R578	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R579	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R583	ERG3FJ151H	M 150OHM,J, 3W	
R705	ERF5ZJ471	W 470OHM,J, 5W	
R714	ERDS1FJ680	C 68OHM,J, 1/2W	
R719	ERF5AK4R7	W 4.7OHM,K, 5W	
R801	TAR26FJ2R7Z	W 2.7OHM, 15W	⚠
R808	ERQ14AJ100E	F 10OHM,J, 1/4W	
R809	ERG2FJ470H	M 47OHM,J, 2W	
R812	ERDS2TJ104	C 100KOHM,J, 1/4W	
R813	ERG2SJS104H	M 100KOHM,J, 2W	
R817	ERDS1TJ330	C 33OHM,J, 1/2W	
R818	ERG2DJ204P	M 200KOHM,J, 2W	
R819	ERDS2TJ121	C 120OHM,J, 1/4W	
R820	ERX12SZJR15E	M 0.15OHM,J, 1/2W	
R821	ERX12SZJR12E	M 0.12OHM,J, 1/2W	
R823	ERDS2TJ152	C 1.5KOHM,J, 1/4W	
R824	ERDS2TJ153	C 15KOHM,J, 1/4W	
R825	ERDS2TJ123	C 12KOHM,J, 1/4W	
R826	ERG1SJ273P	M 27KOHM,J, 1W	
R1061	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R1062	ERJ3GEYJ104	M 100KOHM,J,1/16W	
R1063	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R1101	EXB38V680J	RESISTOR ARRAY	
R1106	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1107	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R1108	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R1109	ERJ3GEY0R00	M 0OHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R1110	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R1111	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R1112	ERJ3GEYJ331	M 330OHM,J,1/16W	
R1113	ERJ3GEYJ331	M 330OHM,J,1/16W	
R1114	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R1115	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1116	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1117	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1118	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1119	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R1120	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1121	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1122	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1123	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1124	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R1125	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R1126	ERJ3GEYJ391	M 390OHM,J,1/16W	
R1127	ERJ3GEYJ471	M 470OHM,J,1/16W	
R1128	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1129	ERJ3GEYJ223	M 22KOHM,J,1/16W	
R1130	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1131	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R1132	ERJ3GEYJ473	M 47KOHM,J,1/16W	
R1133	ERJ3GEYJ182	M 1.8KOHM,J,1/16W	
R1134	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R1135	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1136	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1137	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1138	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1139	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R1140	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1141	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R1143	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1144	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1145	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	
R1146	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	
R1147	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R1148	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R1149	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R1150	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1151	ERJ3GEYJ680	M 68OHM,J,1/16W	
R1152	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1153	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1154	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1155	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R1156	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R1158	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R1160	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1161	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1162	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1163	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1164	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1165	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1166	ERJ3GEYJ101	M 100OHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R1168	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R1304	ERJ3GEYJ181	M 180OHM,J,1/16W	
R1305	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1306	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R1308	ERJ3GEYJ181	M 180OHM,J,1/16W	
R1309	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1310	ERJ3GEYJ221	M 220OHM,J,1/16W	
R1312	ERJ3GEYJ181	M 180OHM,J,1/16W	
R1319	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1320	ERJ3GEYJ121	M 120OHM,J,1/16W	
R1321	ERJ3GEYJ121	M 120OHM,J,1/16W	
R1322	ERJ3EKF1800	M 180OHM,F,1/16W	
R1323	ERJ3EKF1800	M 180OHM,F,1/16W	
R1324	ERJ3EKF1800	M 180OHM,F,1/16W	
R1325	ERJ3EKF1800	M 180OHM,F,1/16W	
R1326	ERJ3EKF1800	M 180OHM,F,1/16W	
R1327	ERJ3EKF1800	M 180OHM,F,1/16W	
R1328	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1329	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1330	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1331	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1332	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1333	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1334	ERJ3GEYJ392	M 3.9KOHM,J,1/16W	
R1335	ERJ3GEYJ182	M 1.8KOHM,J,1/16W	
R1336	ERJ3EKF2201	M 2.2KOHM,F,1/16W	
R1337	ERJ3GEYJ121	M 120OHM,J,1/16W	
R1338	ERJ3GEYJ182	M 1.8KOHM,J,1/16W	
R1339	ERJ3EKF2201	M 2.2KOHM,F,1/16W	
R1340	ERJ3GEYJ121	M 120OHM,J,1/16W	
R1341	ERJ3GEYJ911	M 910OHM,J,1/16W	
R1342	ERJ3EKF2201	M 2.2KOHM,F,1/16W	
R1343	ERJ3EKF1200	M 120OHM,F,1/16W	
R1345	ERJ3GEYJ220	M 22OHM,J,1/16W	
R1346	ERJ3GEYJ220	M 22OHM,J,1/16W	
R1347	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1348	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1360	ERJ3GEYJ162	M 1.6KOHM,J,1/16W	
R1361	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1362	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1364	ERJ3GEYJ221	M 220OHM,J,1/16W	
R1365	ERJ3GEYJ471	M 470OHM,J,1/16W	
R1366	ERJ3GEYJ471	M 470OHM,J,1/16W	
R1367	ERJ3GEYJ221	M 220OHM,J,1/16W	
R1370	ERJ3GEYJ471	M 470OHM,J,1/16W	
R1371	ERJ3GEYJ471	M 470OHM,J,1/16W	
R1375	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1376	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1380	EXB38V103J	RESISTOR ARRAY	
R1383	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1384	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R1385	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1386	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1387	ERJ3EKF1201	M 1.2KOHM,F,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R1388	ERJ3EKF2801	M 2.8KOHM,F,1/16W	
R1389	ERJ3EKF1201	M 1.2KOHM,F,1/16W	
R1390	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R1401	ERJ3GEYJ242	M 2.4KOHM,J,1/16W	
R1406	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1409	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1410	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1411	ERJ3EKF2701	M 2.7KOHM,F,1/16W	
R1412	ERJ3GEYJ271	M 270OHM,J,1/16W	
R1413	ERJ3GEYJ471	M 470OHM,J,1/16W	
R1505	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1506	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1507	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1508	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1509	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R1510	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1511	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1570	ERJ3EKF8202	M 82KOHM,F,1/16W	
R1571	ERJ3EKF1302	M 13KOHM,F,1/16W	
R1580	ERJ3GEYJ151	M 150OHM,J,1/16W	
R1581	ERJ3GEYJ151	M 150OHM,J,1/16W	
R1582	ERJ3GEYJ151	M 150OHM,J,1/16W	
R1583	ERJ3EKF4700	M 470OHM,F,1/16W	
R1584	ERJ3EKF4700	M 470OHM,F,1/16W	
R1585	ERJ3EKF4700	M 470OHM,F,1/16W	
R1586	ERJ3EKF1800	M 180OHM,F,1/16W	
R1587	ERJ3EKF1800	M 180OHM,F,1/16W	
R1588	ERJ3EKF1800	M 180OHM,F,1/16W	
R1590	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1591	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1592	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1593	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1594	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1601	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1602	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1603	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1604	ERJ3GEYJ151	M 150OHM,J,1/16W	
R1605	ERJ3GEYJ151	M 150OHM,J,1/16W	
R1606	ERJ3GEYJ151	M 150OHM,J,1/16W	
R1607	ERJ3GEYJ221	M 220OHM,J,1/16W	
R1608	ERJ3GEYJ221	M 220OHM,J,1/16W	
R1609	ERJ3GEYJ221	M 220OHM,J,1/16W	
R1620	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1624	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1628	ERJ3GEY0R00	M 0OHM,J,1/16W	
R2101	ERJ3GEY0R00	M 0OHM,J,1/16W	
R2102	ERJ3GEY0R00	M 0OHM,J,1/16W	
R2104	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R2105	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R2110	ERJ3GEYJ101	M 100OHM,J,1/16W	
R2111	ERJ3GEYJ101	M 100OHM,J,1/16W	
R2112	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R2113	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R2114	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R2115	ERJ3GEYJ101	M 100OHM,J,1/16W	
R2116	ERJ3GEYJ101	M 100OHM,J,1/16W	
R2117	ERJ3GEYJ101	M 100OHM,J,1/16W	
R2130	ERJ3GEYJ471	M 470OHM,J,1/16W	
R2131	ERJ3GEYJ101	M 100OHM,J,1/16W	
R2301	ERJ3GEYJ151	M 150OHM,J,1/16W	
R2302	ERX3FJS4R7D	M 4.7OHM,J, 3W	
R2303	ERG1SJ102P	M 1KOHM,J, 1W	
R2310	ERJ3GEYJ123	M 12KOHM,J,1/16W	
R2320	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R2330	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R2331	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R2332	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R2333	ERJ3GEY0R00	M 0OHM,J,1/16W	
R2334	ERJ3GEYJ223	M 22KOHM,J,1/16W	
R2335	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R2337	ERJ3GEY0R00	M 0OHM,J,1/16W	
R2338	ERJ3GEYJ303	M 30KOHM,J,1/16W	
R2339	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R3085	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R3086	ERJ3GEYJ331	M 330OHM,J,1/16W	
R3087	ERJ3GEYJ750	M 75OHM,J,1/16W	
R3088	ERJ3GEYJ331	M 330OHM,J,1/16W	
R3089	ERJ3GEYJ750	M 75OHM,J,1/16W	
R3090	ERJ3GEYJ221	M 220OHM,J,1/16W	
R3104	ERDS2TJ102	C 1KOHM,J, 1/4W	
R3150	ERJ3GEYJ220	M 22OHM,J,1/16W	
R3151	ERJ3GEYJ220	M 22OHM,J,1/16W	
R3152	ERJ3GEYJ220	M 22OHM,J,1/16W	
R3153	ERJ3GEYJ750	M 75OHM,J,1/16W	
R3154	ERJ3GEYJ750	M 75OHM,J,1/16W	
R3155	ERJ3GEYJ750	M 75OHM,J,1/16W	
R3156	ERJ3GEYJ333	M 33KOHM,J,1/16W	
R3157	ERJ3GEYJ101	M 100OHM,J,1/16W	
R3158	ERJ3GEYJ101	M 100OHM,J,1/16W	
R3159	ERJ3GEYJ333	M 33KOHM,J,1/16W	
R3160	ERDS2TJ681	C 680OHM,J, 1/4W	
R3161	ERDS2TJ151	C 150OHM,J, 1/4W	
R3162	ERJ3GEYJ101	M 100OHM,J,1/16W	
R3163	ERJ3GEYJ101	M 100OHM,J,1/16W	
R3301	ERJ3GEY0R00	M 0OHM,J,1/16W	
R3302	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R3303	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R3304	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R3305	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R3306	ERJ3GEYJ221	M 220OHM,J,1/16W	
R3307	ERJ3GEYJ221	M 220OHM,J,1/16W	
R3308	ERJ3GEY0R00	M 0OHM,J,1/16W	
R3311	ERJ3GEY0R00	M 0OHM,J,1/16W	
R3312	ERJ3GEY0R00	M 0OHM,J,1/16W	
R3313	ERJ3GEY0R00	M 0OHM,J,1/16W	
R3314	ERJ3GEYJ750	M 75OHM,J,1/16W	
R3315	ERJ3GEYJ750	M 75OHM,J,1/16W	
R3316	ERJ3GEYJ750	M 75OHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R3317	ERJ3GEY0R00	M 0OHM,J,1/16W	
R3320	ERJ3GEYJ331	M 330OHM,J,1/16W	
R3321	ERJ3GEYJ331	M 330OHM,J,1/16W	
R3322	ERJ3GEYJ331	M 330OHM,J,1/16W	
R3330	ERJ3GEY0R00	M 0OHM,J,1/16W	
R3331	ERJ3GEY0R00	M 0OHM,J,1/16W	
R3332	ERJ3GEY0R00	M 0OHM,J,1/16W	
R4801	ERJ6GEYJ102	M 1KOHM,J,1/10W	
R4803	ERX12SJ2R7E	M 2.7OHM,J, 1/2W	
R4804	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	
R4805	ERJ3EKF1331	M1.33KOHM,F,1/16W	
R4806	ERJ3EKF3320	M 332OHM,F,1/16W	
R4807	ERJ3EKF1001	M 1KOHM,F,1/16W	
R4808	ERJ3EKF3832	M38.3KOHM,F,1/16W	
R4809	ERJ3EKF9091	M9.09KOHM,F,1/16W	
R4810	ERJ3EKF2213	M 221KOHM,F,1/16W	
R4811	ERJ3EKF5491	M5.49KOHM,F,1/16W	
R4812	ER0S2CKF5621	M5.62KOHM,F, 1/4W	
R4815	ERDS1FJ6R8	C 6.8OHM,J, 1/2W	
R4816	ERDS1FJ390	C 39OHM,J, 1/2W	
R4818	ERX12SJ2R7E	M 2.7OHM,J, 1/2W	
R4819	ERJ6GEYJ272	M 2.7KOHM,J,1/10W	
R4820	ERJ6ENF1331	M1.33KOHM, 1/10W	
R4821	ERJ6ENF3320	M 332OHM, 1/10W	
R4822	ERJ6ENF1001	M 1KOHM, 1/10W	
R4823	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	
R4824	ERJ6ENF5621	M5.62KOHM, 1/10W	
R4825	ERJ6ENF3832	M38.3KOHM, 1/10W	
C458	ECQB1104KF	P 0.1UF, K,100V	
C459	ECA1HM220B	E 22UF, 50V	
C460	ECQB1224KF	P 0.22UF, K,100V	
C462	ECQV1H224JL	P 0.22UF, J, 50V	
C502	ECA2EM330B	E 33UF, 250V	
C504	ECA1HM100B	E 10UF, 50V	
C505	ECA160V33UE	E 33UF, 160V	
C507	ECA1EM222E	E 2200UF, 25V	
C509	ECA1EM222E	E 2200UF, 25V	
C510	ECQB1H103JF	P 0.01UF, 50V	
C511	F2A1H100A165	E 10UF, 50V	
C521	F1B1H103A013	C 0.01UF, 50V	
C525	ECA1HHG010	E 1UF, 50V	
C529	ECQM1823KZ	P 0.082UF, K,100V	
C531	ECEA2CNR47S	E 0.47UF, 160V	
C532	ECKR1H472KB5	C 4700PF, K, 50V	
C533	ECKW2H103ZF7	C 0.01UF, Z,500V	
C534	ECQB1H223JF	P 0.022UF, J, 50V	
C536	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C537	ECJ1VB1H102K	C 1000PF, K, 50V	
C544	ECA1EM102B	E 1000UF, 25V	
C545	ECA1VM101B	E 100UF, 35V	
C549	ECQV1H104JL	P 0.1UF, J, 50V	
C554	ECKW3D391JBR	C 390PF, J, 2KV	
C555	ECWH20102JVY	P 1000PF,J, 2KV	
C556	ECWH20512JVB	P 5100PF,J, 2KV	

Ref. No.	Part No.	Part Name & Description	Remarks
C557	ECWH20512JVB	P 5100PF,J, 2KV	
C560	ECQF4183JZH	P 0.018UF, J,400V	
C561	ECQF4153JZ	P 0.015UF, J,400V	
C565	ECQP1223JZ	P 0.022UF, J,100V	
C567	ECKR3A821JBP	C 820PF, J, 1KV	
C568	ECEA1HKA0R1	E 0.1UF, 50V	
C575	ECJ1VC1H221J	C 220PF, J, 50V	
C581	ECWF2364JB	P 0.36UF, J,250V	
C582	ECWF2364JB	P 0.36UF, J,250V	
C583	ECWF2274JB	P 0.27UF, J,250V	
C584	ECWF2334JB	P 0.33UF, J,250V	
C585	ECKR3A272KBP	C 2700PF, K, 1KV	
C703	ECQE2334KF	P 0.33UF, K,250V	
C705	ECKW3A272KBP	C 2700PF, K, 1KV	
C710	ECQE1335KF	P 3.3UF, K,100V	
C711	ECQE1335KF	P 3.3UF, K,100V	
C715	ECKW3D271KBP	C 270PF, K, 2KV	
C801	ECQU2A224BN9	P 0.22UF, 250V	⚠
C802	ECQU2A224BN9	P 0.22UF, 250V	⚠
C804	ECQU2A224BN9	P 0.22UF, 250V	⚠
C806	ECKCNA472ME7	C 4700PF, M,	⚠
C807	ECKWAE472ZED	C 4700PF, Z,500V	⚠
C808	ECKWAE472ZED	C 4700PF, Z,500V	⚠
C809	ECKWAE472ZED	C 4700PF, Z,500V	⚠
C810	F2A2G5610001	E 560UF, 400V	
C812	ECQM4473JZ	P 0.047UF, J,400V	
C816	ECA2AM100B	E 10UF, 100V	
C817	ECQB1H104JF	P 0.1UF, 50V	
C818	ECQB1H104JF	P 0.1UF, 50V	
C819	F4Y5P4B102K	C 1000PF, K, 50V	
C820	ECKW3D102KBP	C 1000PF, K, 2KV	
C821	ECKW3D101KBP	C 100PF, K, 2KV	
C822	ECKW3D101KBP	C 100PF, K, 2KV	
C823	ECKR3A331KBP	C 330PF, K, 1KV	
C827	ECKR3A471KBP	C 470PF, K, 1KV	
C830	ECQB1H473JF	P 0.047UF, J, 50V	
C831	ECA1CM470B	E 47UF, 16V	
C1162	ECJ1VC1H221J	C 220PF, J, 50V	
C1167	ECJ1VC1H561J	C 560PF, J, 50V	
C1170	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1171	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1172	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1190	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1201	ECA1HHG220	E 22UF, 50V	
C1210	ECA1CM101B	E 100UF, 16V	
C1211	ECJ1VF1H103Z	C 0.01UF, Z, 50V	
C1215	ECJ2VF1E104Z	C 0.1UF, Z, 25V	
C1216	ECJ2VF1E104Z	C 0.1UF, Z, 25V	
C1230	ECEA1CN470U	E 47UF, 16V	
C1231	ECA1CM471B	E 470UF, 16V	
C1232	ECJ1VC1H680J	C 68PF, J, 50V	
C1250	ECJ1VF1H104Z	C 0.1UF, Z, 50V	

Ref. No.	Part No.	Part Name & Description	Remarks
C1251	ECA1CM222B	E 2200UF, 16V	
C1252	ECA0JM222B	E 2200UF, 6.3V	
C1253	EEUFC1A471B	E 470UF, 10V	
C1256	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C1257	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C1260	ECA1CM471B	E 470UF, 16V	
C1261	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C1262	ECA1CM471B	E 470UF, 16V	
C1263	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C1265	ECA0JM101B	E 100UF, 6.3V	
C1266	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C1268	ECA0JM101B	E 100UF, 6.3V	
C1270	ECA1HM100B	E 10UF, 50V	
C1271	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C1272	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C1273	ECA1HM100B	E 10UF, 50V	
C1280	ECJ1VF1H103Z	C 0.01UF, Z, 50V	
C1281	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C1282	ECJ2VF1H103Z	C 0.01UF, Z, 50V	
C1301	ECJ1VB0J105K	C 1UF, K,6.3V	
C1302	ECJ1VB0J105K	C 1UF, K,6.3V	
C1303	ECJ1VB0J105K	C 1UF, K,6.3V	
C1304	ECJ1VB0J105K	C 1UF, K,6.3V	
C1305	ECJ1VC1H150J	C 15PF, J, 50V	
C1306	ECJ1VC1H100D	C 10PF, D, 50V	
C1307	ECJ1VB0J105K	C 1UF, K,6.3V	
C1308	ECJ1VB0J105K	C 1UF, K,6.3V	
C1309	ECJ1VB0J105K	C 1UF, K,6.3V	
C1310	ECJ1VB0J105K	C 1UF, K,6.3V	
C1311	ECJ1VB0J105K	C 1UF, K,6.3V	
C1312	ECJ1VB0J105K	C 1UF, K,6.3V	
C1313	EEVHB1C100R	E 10UF, 16V	
C1314	ECJ1VB0J105K	C 1UF, K,6.3V	
C1315	ECJ1VB0J105K	C 1UF, K,6.3V	
C1317	ECJ1VB0J105K	C 1UF, K,6.3V	
C1318	ECJ1VB0J105K	C 1UF, K,6.3V	
C1319	ECJ1VB0J105K	C 1UF, K,6.3V	
C1320	ECJ1VB0J105K	C 1UF, K,6.3V	
C1321	ECJ1VB0J105K	C 1UF, K,6.3V	
C1322	EEVHB0J101P	E 100UF, 6.3V	
C1324	ECJ1VB0J105K	C 1UF, K,6.3V	
C1325	ECJ1VB0J105K	C 1UF, K,6.3V	
C1326	ECJ1VB0J105K	C 1UF, K,6.3V	
C1327	ECJ1VB0J105K	C 1UF, K,6.3V	
C1328	ECJ1VB0J105K	C 1UF, K,6.3V	
C1329	ECJ1VB0J105K	C 1UF, K,6.3V	
C1330	EEVHP1H1R0R	E 1UF, 50V	
C1331	ECJ1VC1H101J	C 100PF, J, 50V	
C1410	ECJ1VB0J105K	C 1UF, K,6.3V	
C1411	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1412	ECJ1VB0J105K	C 1UF, K,6.3V	
C1414	ECJ1VB0J105K	C 1UF, K,6.3V	
C1415	ECJ1VC1H680J	C 68PF, J, 50V	
C1416	ECJ1VC1H330J	C 33PF, J, 50V	

Ref. No.	Part No.	Part Name & Description	Remarks
C1417	ECJ1VB1H103K	C 0.01UF, K, 50V	
C1418	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1419	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1420	ECJ1VB0J105K	C 1UF, K,6.3V	
C1421	ECJ1VB0J105K	C 1UF, K,6.3V	
C1422	ECJ1VB0J105K	C 1UF, K,6.3V	
C1423	ECJ1VB0J105K	C 1UF, K,6.3V	
C1424	ECJ1VB0J105K	C 1UF, K,6.3V	
C1425	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1426	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1427	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1428	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1429	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1430	ECJ1VB0J105K	C 1UF, K,6.3V	
C1440	ECJ1VB0J105K	C 1UF, K,6.3V	
C1441	ECJ1VB0J105K	C 1UF, K,6.3V	
C1442	ECJ1VB0J105K	C 1UF, K,6.3V	
C1443	ECJ1VB0J105K	C 1UF, K,6.3V	
C1444	ECJ1VB0J105K	C 1UF, K,6.3V	
C1445	ECJ1VB0J105K	C 1UF, K,6.3V	
C1446	ECJ1VB0J105K	C 1UF, K,6.3V	
C1447	ECJ1VB0J105K	C 1UF, K,6.3V	
C1448	ECJ1VB0J105K	C 1UF, K,6.3V	
C1449	ECJ1VB0J105K	C 1UF, K,6.3V	
C1450	ECJ1VB0J105K	C 1UF, K,6.3V	
C1451	ECJ1VB0J105K	C 1UF, K,6.3V	
C1452	EEVHB1C100R	E 10UF, 16V	
C1455	ECJ1VB0J105K	C 1UF, K,6.3V	
C1456	ECJ1VB0J105K	C 1UF, K,6.3V	
C1457	ECJ1VB0J105K	C 1UF, K,6.3V	
C1458	ECJ1VB0J105K	C 1UF, K,6.3V	
C1459	ECJ1VB0J105K	C 1UF, K,6.3V	
C1460	ECJ1VB0J105K	C 1UF, K,6.3V	
C1461	ECJ1VB0J105K	C 1UF, K,6.3V	
C1462	ECJ1VB0J105K	C 1UF, K,6.3V	
C1463	ECJ1VB0J105K	C 1UF, K,6.3V	
C1464	ECJ1VB0J105K	C 1UF, K,6.3V	
C1465	ECJ1VB0J105K	C 1UF, K,6.3V	
C1466	ECJ1VB0J105K	C 1UF, K,6.3V	
C1467	EEVHB1C100R	E 10UF, 16V	
C1473	ECJ1VB0J105K	C 1UF, K,6.3V	
C1474	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1476	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1477	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1478	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1479	EEVHB1C100R	E 10UF, 16V	
C1480	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1481	ECJ1VB1H103K	C 0.01UF, K, 50V	
C1482	EEVHB1C470P	E 47UF, 16V	
C1485	ECJ1VB1H103K	C 0.01UF, K, 50V	
C1486	ECJ1VB1H103K	C 0.01UF, K, 50V	
C1487	ECJ1VB1H103K	C 0.01UF, K, 50V	
C1490	ECJ1VB1H103K	C 0.01UF, K, 50V	
C1491	ECJ1VB1H103K	C 0.01UF, K, 50V	

Ref. No.	Part No.	Part Name & Description	Remarks
C1492	ECJ1VB1C223K	C 0.022UF, K, 16V	
C1495	ECHU1C683JB5	P 0.068UF, J, 16V	
C1496	EEVHB0J101P	E 100UF, 6.3V	
C2320	ECQV1H334JM	P 0.33UF, J, 50V	
C2321	ECJ1VB1H562K	C 5600PF, K, 50V	
C2322	ECA1HM2R2B	E 2.2UF, 50V	
C2330	ECA1CM101B	E 100UF, 16V	
C2801	ECA1HM010B	E 1UF, 50V	
C2802	ECJ1VF1C224Z	C 0.22UF, Z, 16V	
C2803	ECJ1VF1H103Z	C 0.01UF, Z, 50V	
C2804	ECA1HM2R2B	E 2.2UF, 50V	
C2805	ECEA1HN2R2U	E 2.2UF, 50V	
C2806	ECEA1HN2R2U	E 2.2UF, 50V	
C2809	ECJ1VF1H102Z	C 1000PF, Z, 50V	
C2810	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C2811	ECA1HM010B	E 1UF, 50V	
C2812	ECJ1VF1C224Z	C 0.22UF, Z, 16V	
C2813	ECJ2VB1H561K	C 560PF, K, 50V	
C2816	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2817	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2819	ECJ1VF1H102Z	C 1000PF, Z, 50V	
C2820	ECA1EM102B	E 1000UF, 25V	
C2821	ECA1EM102B	E 1000UF, 25V	
C2831	ECJ1VF1H103Z	C 0.01UF, Z, 50V	
C3001	ECJ2VF1C105Z	C 1UF, Z, 16V	
C3002	ECA1HM2R2B	E 2.2UF, 50V	
C3003	ECJ1VB1H682K	C 6800PF, K, 50V	
C3004	ECA1HM2R2B	E 2.2UF, 50V	
C3005	ECJ1VB1H682K	C 6800PF, K, 50V	
C3007	ECJ1VF1C474Z	C 0.47UF, Z, 16V	
C3008	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C3009	ECJ2VF1C105Z	C 1UF, Z, 16V	
C3010	ECJ1VC1H561K	C 560PF, K, 50V	
C3011	ECJ1VC1H561K	C 560PF, K, 50V	
C3012	ECJ1VC1H561K	C 560PF, K, 50V	
C3013	ECJ1VC1H561K	C 560PF, K, 50V	
C3015	ECJ2VF1C105Z	C 1UF, Z, 16V	
C3016	ECA1HM2R2B	E 2.2UF, 50V	
C3017	ECJ1VB1H682K	C 6800PF, K, 50V	
C3018	ECA1HM2R2B	E 2.2UF, 50V	
C3019	ECJ1VB1H682K	C 6800PF, K, 50V	
C3020	ECJ1VF1H103Z	C 0.01UF, Z, 50V	
C3024	ECA1CM101B	E 100UF, 16V	
C3025	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C3026	ECA1CM101B	E 100UF, 16V	
C3027	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3030	ECEA1CN470U	E 47UF, 16V	
C3031	ECEA1AKA221	E 220UF, 10V	
C3032	ECEA1AKA221	E 220UF, 10V	
C3033	ECJ1VC1H561K	C 560PF, K, 50V	
C3034	ECJ1VC1H561K	C 560PF, K, 50V	
C3035	ECJ1VC1H471J	C 470PF, J, 50V	
C3036	ECA1HM2R2B	E 2.2UF, 50V	
C3037	ECJ1VC1H471J	C 470PF, J, 50V	

Ref. No.	Part No.	Part Name & Description	Remarks
C3038	ECA1HM2R2B	E 2.2UF, 50V	
C3048	ECJ2VF1C105Z	C 1UF, Z, 16V	
C3049	ECA1HM220B	E 22UF, 50V	
C3050	ECA1CM101B	E 100UF, 16V	
C3051	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C3053	ECJ1VC1H561K	C 560PF, K, 50V	
C3054	ECJ1VC1H561K	C 560PF, K, 50V	
C3055	ECA1HM2R2B	E 2.2UF, 50V	
C3056	ECJ1VB1H682K	C 6800PF, K, 50V	
C3057	ECJ2VF1C105Z	C 1UF, Z, 16V	
C3058	ECA1HM2R2B	E 2.2UF, 50V	
C3059	ECJ1VB1H682K	C 6800PF, K, 50V	
L501	EXCELDR35V	CORE	
L504	EXCELSA35T	BEAD CORE	
L506	EXCELSA35T	BEAD CORE	
L515	TALL08T680KA	INDUCTION COIL	
L532	EXCELDR35V	CORE	
L553	EXCELDR35C	BEAD CORE	
L554	EXCELDR35C	BEAD CORE	
L560	EXCELDR35C	BEAD CORE	
L561	EXCELDR35C	BEAD CORE	
L563	EXCELDR35C	BEAD CORE	
L565	EXCELSA35T	BEAD CORE	
L570	EXCELDR35V	CORE	
L581	G0A151H00004	CHOKE COIL	
L583	ELH5L7130	LINEARITY COIL	
L586	ERD25TC0	C 0OHM, 1/4W	
L701	ELC18E152	CHOKE COIL	
L702	G0A331G00005	CHOKE COIL	
L703	EXCELSA35T	BEAD CORE	
L704	EXCELDR35V	CORE	
L802	TLP4GD005	LINE FILTER	⚠
L803	TLP4GD005	LINE FILTER	⚠
L815	EXCELSA39E	BEAD CHOKE	
L820	EXCELSA39E	BEAD CHOKE	
L850	EXCELSA35B	BEAD CORE	
L851	EXCELSA35B	BEAD CORE	
L853	EXCELDR35C	BEAD CORE	
L855	EXCELDR35C	BEAD CORE	
L892	EXCELDR25V	CORE	
L893	EXCELDR25V	CORE	
L904	TLTACT560J	PEAKING COIL	
L953	EXCELSA35T	BEAD CORE	
L954	EXCELSA35T	BEAD CORE	
L956	EXCELSA35T	BEAD CORE	
L1120	ELJFA5R6JF	CHIP INDUCTOR	
L1121	TALC325T4R7M	CHIP INDUCTOR COIL	
L1139	TALC325T4R7M	CHIP INDUCTOR COIL	
L1141	TALC325T4R7M	CHIP INDUCTOR COIL	
L1150	TALC325T4R7M	CHIP INDUCTOR COIL	
L1151	TALC325T4R7M	CHIP INDUCTOR COIL	
L1170	TALC325T4R7M	CHIP INDUCTOR COIL	
L1171	TALC325T4R7M	CHIP INDUCTOR COIL	

Ref. No.	Part No.	Part Name & Description	Remarks
L1172	TALC325T4R7M	CHIP INDUCTOR COIL	
L1210	TLTACT100K	PEAKING COIL 10U	
L1230	TLTACT4R7J	PEAKING COIL	
L1250	EXCELDR35V	CORE	
L1251	EXCELDR35V	CORE	
L1252	EXCELDR35V	CORE	
L1253	TLPF095	CHOKE COIL	
L1255	EXCELDR35V	CORE	
L1256	EXCELDR35V	CORE	
L1257	TALL08T330KA	INDUCTION COIL	
L1258	G0A221GA0013	COIL	
L1261	ERDS2TC0	C 0OHM, 1/4W	
L1315	TALC325T4R7M	CHIP INDUCTOR COIL	
L1334	TALC325T4R7M	CHIP INDUCTOR COIL	
L1335	G1C2R2K00006	COIL	
L1336	G1C2R2K00006	COIL	
L1337	G1C2R2K00006	COIL	
L1338	G1C1R5K00004	COIL	
L1350	TALC325T4R7M	CHIP INDUCTOR COIL	
L1352	TALC325T4R7M	CHIP INDUCTOR COIL	
L1360	TALC325T4R7M	CHIP INDUCTOR COIL	
L1361	TALC325T4R7M	CHIP INDUCTOR COIL	
LC1523	ELKE103FA	NOISE FILTER	
LC1528	J0HABB000004	EMI FILTER	
LC1529	J0HAAB000012	EMI FILTER	
LC1530	J0HAAB000012	EMI FILTER	
LC1532	J0HAAB000012	EMI FILTER	
LC1533	J0HABB000003	EMI FILTER	
LC1534	J0HAAB000012	EMI FILTER	
LC1535	J0HAAB000012	EMI FILTER	
LC1536	J0HAAB000012	EMI FILTER	
LC1537	J0HAAB000012	EMI FILTER	
LC1541	J0HAAB000012	EMI FILTER	
LC1542	J0HAAB000012	EMI FILTER	
LC1543	J0HAAB000012	EMI FILTER	
LC1544	J0HAAB000012	EMI FILTER	
LC1545	J0HAAB000012	EMI FILTER	
LC1546	J0HAAB000012	EMI FILTER	
LC1547	J0HAAB000012	EMI FILTER	
LC1548	J0HAAB000012	EMI FILTER	
LC1550	ELKE103FA	NOISE FILTER	
LC4801	L2DA00000006	GEOMAGNETIC SENSOR	
	TRANSFORMERS		
T501	ZTFN35002A	FLYBACK TRANS	⚠
T550	ETH19Y187AY	H DRIVE TRANS	⚠
T801	TLP4GA015D	SWITCHING TRANS	⚠
	DIODES		
D105	MA3150HTX	ZENER DIODE	
D106	MA3150HTX	ZENER DIODE	
D120	MA152KTX	DIODE	
D351	D1NL40V70	DIODE	
D352	D1NL40V70	DIODE	
D353	MA3110LTX	ZENER DIODE	

Ref. No.	Part No.	Part Name & Description	Remarks
D355	D1NL40V70	DIODE	
D356	D1NL40V70	DIODE	
D358	MA151KTX	DIODE	
D360	D1NL20UV70	DIODE	
D361	MA151KTX	DIODE	
D362	MA151KTX	DIODE	
D363	MA151KTX	DIODE	
D364	MA3130MTX	ZENER DIODE	
D365	MA3130MTX	ZENER DIODE	
D366	MA3130MTX	ZENER DIODE	
D383	D1NL40V70	DIODE	
D385	ERA22-04	DIODE	
D389	D1NL40V70	DIODE	
D401	MA152KTX	DIODE	
D402	MA152KTX	DIODE	
D403	MA152KTX	DIODE	
D415	MA152KTX	DIODE	
D452	MA152KTX	DIODE	
D453	EU02AV1	DIODE	
D454	MA152KTX	DIODE	
D455	MAZ30560LL	ZENER DIODE	
D501	AU02	DIODE	
D502	D1NL20UV70	DIODE	
D503	MA4104J	DIODE	
D504	MA165	DIODE	
D505	RU2MLFA1	DIODE	
D506	RU2MLFA1	DIODE	
D507	MA3180MTX	DIODE	
D508	MA3180MTX	DIODE	
D510	MA165	DIODE	
D511	MA165	DIODE	
D520	MA165	DIODE	
D2332	MA152KTX	DIODE	
D2333	MA29Q-A	DIODE	
D2334	MA152KTX	DIODE	
D2804	RN2ZLFA1	DIODE	
D2805	RN2ZLFA1	DIODE	
D3001	MA3091LTX	ZENER DIODE	
D3002	MA4036H	DIODE	
D3050	MA4100H	DIODE	
D3080	MA3091LTX	ZENER DIODE	
D3101	MA4036H	DIODE	
D3150	MA4033M	DIODE	
D3151	MA4033M	DIODE	
D4801	MA3056MTX	DIODE	
	INTEGRATED CIRCUITS		
IC351	TDA6111Q	IC	
IC352	TDA6111Q	IC	
IC353	TDA6111Q	IC	
IC401	NJM2903M	LINEAR IC	
IC451	TDA8177	IC	
IC501	NJM2903M	LINEAR IC	
IC801	STRX6456LF02	IC	⚠
IC860	SE140N	LINEAR IC	

Ref. No.	Part No.	Part Name & Description	Remarks
IC881	PQ12RD1B	LINEAR IC	
IC882	AN7809	LINEAR IC	
IC883	AN7808	LINEAR IC	
IC884	PQ05RD1B	LINEAR IC	
IC1051	B3RAC0000005	REMOTE CONTROL	
IC1101	SDA5550M	IC	
IC1102	TVR4G6-2	FLASH MEMORY IC	
IC1202	CXA1315M	LINEAR IC	
IC1210	C0DAAGG00002	IC	
IC1211	C0DBEZD00002	IC	
IC1212	SI-3025KS-TL	IC	
IC1213	PST9119NR	IC, LOGIC	
IC1214	SI-3025KS-TL	IC	
IC1215	PST9128NR	IC, LOGIC	
IC1216	AN78L05	LINEAR IC	
IC1301	C1ZBZ0001989	IC	
IC1302	PQ1X251M2ZP	IC	
IC1303	NJM2904M	LINEAR IC	
IC1305	PQ1X251M2ZP	IC	
IC1354	C0DBZFC00048	IC	
IC1403	AN5876S	IC	
IC1404	NJM2904M	LINEAR IC	
IC1440	C3HBKZ000001	IC	
IC1441	C3HBKZ000001	IC	
IC1470	C0CBCBD00006	IC	
IC1501	TC7MBD3245KL	IC	
IC1502	TVR4GAS215	EEPROM IC	
IC1503	TVR4GAS219	EEPROM IC	
IC1601	AN5876S	IC	
IC2101	MSP3411GAB83	SOUND CONTROL	
IC2301	TDA7481	LINEAR IC	
IC2801	TDA2616/N1	IC	
IC3001	MM1492AF	IC	
IC3301	TDA8601T/C1	IC	
IC3302	TDA8601T/C1	IC	
IC4801	PUB4301	TRANSISTOR ARRAY	
IC4802	AN6564NS	LINEAR IC	
IC4803	PUB4301	TRANSISTOR ARRAY	
IC4804	AN6564	LINEAR IC	
IC4805	TC4066BFN	IC	
IC4861	AN6562	LINEAR IC	
Q1603	B1ABCF000078	TRANSISTOR	
Q2101	B1ABCF000078	TRANSISTOR	
Q2110	2SA1037AKT	TRANSISTOR	
Q2111	2SA1037AKT	TRANSISTOR	
Q2112	2SA1037AKT	TRANSISTOR	
Q2330	2SA1037AKT	TRANSISTOR	
Q2331	B1ABCF000078	TRANSISTOR	
Q2332	B1ABCF000078	TRANSISTOR	
Q2333	B1ABCF000078	TRANSISTOR	
Q2334	B1ABCF000078	TRANSISTOR	
Q3030	B1ABCF000078	TRANSISTOR	
Q3031	B1ABCF000078	TRANSISTOR	
Q3032	B1ABCF000078	TRANSISTOR	

Ref. No.	Part No.	Part Name & Description	Remarks
Q3033	B1ABCF000078	TRANSISTOR	
Q3150	B1ABCF000078	TRANSISTOR	
Q3151	B1ABCF000078	TRANSISTOR	
Q3303	ERJ3GEY0R00	M 0OHM,J,1/16W	
Q3304	ERJ3GEY0R00	M 0OHM,J,1/16W	
Q3305	ERJ3GEY0R00	M 0OHM,J,1/16W	
Q4801	B1ABCF000078	TRANSISTOR	
Q4802	B1ABCF000078	TRANSISTOR	
	OTHERS		
A1	TJS3A9900	10P CONNECTOR	
A7	TJS3A9890	9P CONNECTOR	
A11	K1KB35B00001	CONNECTOR	
A15	TJS118590	2P CONNECTOR	
A16	TJS3A9890	9P CONNECTOR	
A17	TJS3A9890	9P CONNECTOR	
A20	TJS4G411	CONNECTOR	
A22	TJS3A9660	CONNECTOR	
A23	TJS3A9650	4P CONNECTOR	
A24	TJS4G8020	16P CONNECTOR	
A25	TJS4G8020	16P CONNECTOR	
A27	TJS4G413	CONNECTOR	
A50	TJSF29207	CONNECTOR	
A51	K1MM82A00001	CONNECTOR	
A52	TJS118590	2P CONNECTOR	
A90	K1KA05A00164	CONNECTOR	
A92	TJS3A9640	3P CONNECTOR	
DG85	TJS4G415	CONNECTOR	
DG86	TJS4G416	CONNECTOR	
DY2	TJS3A9640	3P CONNECTOR	
F801	XBA2C50TR0	FUSE	⚠
G20	TJS4G412	CONNECTOR	
G27	TJS4G414	CONNECTOR	
GM1	TJS3A9890	9P CONNECTOR	
GM2	TJS3A9660	CONNECTOR	
H11	K1KA35B00003	CONNECTOR	
H12	TJS1A8090	PHONO PIN	
H15	K1KA02B00044	2P CONNECTOR	
H52	TJS118590	2P CONNECTOR	
JA1	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA5	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA6	ERJ3GEY0R00	M 0OHM,J,1/16W	
JK1	TJB4G647	FRONT AV TERMINAL	
JK351	K3B10CA00040	CRT SOCKET	⚠
JK3001	K4BK40A00003	REAR AV TERMINAL	
JK3150	TJSF26815	15P CONNECTOR	
JS105	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS106	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS108	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS109	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS114	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3051	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3052	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3101	ERJ3GEY0R00	M 0OHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
JS3102	ERJ3GEY0R00	M 0OHM,J,1/16W	
L1	TJS3A9900	10P CONNECTOR	
L2	TJS3A9640	3P CONNECTOR	
L3	TJS3A9670	6P CONNECTOR	
P90	K1KA05A00164	CONNECTOR	
P92	TJS3A9640	3P CONNECTOR	
RL891	K6B2ADA00005	RELAY	⚠
RT1	TJS3A9640	3P CONNECTOR	
RT2	TJS3A9640	3P CONNECTOR	
S801	ESB92DA1B	SWITCH	⚠
S1280	EVQ11G05R	SWITCH	
S1281	EVQ11G05R	SWITCH	
S1282	EVQ11G05R	SWITCH	
S1283	EVQ11G05R	SWITCH	
S1284	EVQ11G05R	SWITCH	
S1285	EVQ11G05R	SWITCH	
TNR1	ENG39613G	TUNER	⚠
X3	TJS3A9670	6P CONNECTOR	
X24	TJS4G8010	16P CONNECTOR	
X25	TJS4G8010	16P CONNECTOR	
X1150	H0J600400006	CRYSTAL OSCILLATOR	
X1301	TSSA171	CRYSTAL OSCILLATOR	
X2130	TSSA128	CRYSTAL OSCILLATOR	
R370	ERJ3GEYJ271	M 270OHM,J,1/16W	
R371	ERJ3EKF1801	M 1.8KOHM,F,1/16W	
R372	ERJ3EKF1401	M 1.4KOHM,F,1/16W	
R373	ERG3FJ823H	M 82KOHM,J, 3W	
R374	ERJ3GEY0R00	M 0OHM,J,1/16W	
R375	ERJ3GEYJ822	M 8.2KOHM,J,1/16W	
R376	ERC12GK561	S 560OHM,K, 1/2W	
R381	ERG3FJ470H	M 47OHM,J, 3W	
R382	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R385	ERJ3GEYJ184	M 180KOHM,J,1/16W	
R387	ERDS1TJ471	C 470OHM,J, 1/2W	
R389	ERJ3EKF1620	M 162OHM,F,1/16W	
R401	ERJ3EKF8201	M 8.2KOHM,F,1/16W	
R402	ERJ3EKF3902	M 39KOHM,F,1/16W	
R403	ERJ3EKF1402	M 14KOHM,F,1/16W	
R404	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R405	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R406	ERJ3EKF1002	M 10KOHM,F,1/16W	
R407	ERJ3EKF8450	M 845OHM,F,1/16W	
R408	ERJ3EKF9760	M 976OHM,F,1/16W	
R409	ERJ3GEYJ473	M 47KOHM,J,1/16W	
R410	ERJ3GEYJ473	M 47KOHM,J,1/16W	
R411	ERJ3GEYJ121	M 120OHM,J,1/16W	
R412	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R415	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R416	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R417	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R418	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R419	ERJ3GEYJ152	M 1.5KOHM,J,1/16W	
R451	ERDS1TJ1R5	C 1.5OHM,J, 1/2W	

Ref. No.	Part No.	Part Name & Description	Remarks
R452	ERDS1TJ1R5	C 1.5OHM,J, 1/2W	
R453	ERJ3GEYJ393	M 39KOHM,J,1/16W	
R454	ERJ3GEYJ123	M 12KOHM,J,1/16W	
R455	ERJ3GEYJ101	M 100OHM,J,1/16W	
R456	ERG3FJ331H	M 330OHM,J, 3W	
R457	ERJ3EKF7151	M7.15KOHM,F,1/16W	
R458	ERJ3EKF3481	M3.48KOHM,F,1/16W	
R459	ERJ3EKF9531	M9.53KOHM,F,1/16W	
R460	ERJ3EKF3011	M3.01KOHM,F,1/16W	
R461	ERDS1FJ1R0	C 1OHM,J, 1/2W	
R462	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R465	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R467	ERJ3GEYJ471	M 470OHM,J,1/16W	
R468	ERJ3GEYJ224	M 220KOHM,J,1/16W	
R469	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R470	ERJ3GEY0R00	M 0OHM,J,1/16W	
R471	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R472	ERJ3GEYJ683	M 68KOHM,J,1/16W	
R502	ERQ14AJ100	F 10OHM, J,1/4W	
R503	ER0S2CKF1152	M11.5KOHM,F, 1/4W	
R504	ER0S2CHF8661	M8.66KOHM,F, 1/4W	
R506	ERDS1FJ1R0	C 1OHM,J, 1/2W	
R507	ERDS1FJ1R0	C 1OHM,J, 1/2W	
R508	ERQ2CJP3R0S	F 3OHM,J, 2W	
R510	ERDS1TJ333	C 33KOHM,J, 1/2W	
R511	ERDS2TJ821	C 820OHM,J, 1/4W	
R512	ERDS2TJ562	C 5.6KOHM,J, 1/4W	
R513	ERDS2TJ103	C 10KOHM,J, 1/4W	
R514	ERDS2TJ333	C 33KOHM,J, 1/4W	
R515	ERF7ZK2R2	W 2.2OHM, 7W	
R518	ERJ3GEYJ153	M 15KOHM,J,1/16W	
R519	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R827	ERX12SJ1R0P	M 1OHM,J, 1/2W	
R832	ERDS2TJ102	C 1KOHM,J, 1/4W	
R834	ERDS2TJ103	C 10KOHM,J, 1/4W	
R840	ERD75TAJ825	C 8.2MOHM,J, 3/4W	
R851	ERQ2CKR33	F 0.33OHM,K, 2W	
R853	D0D5R33KA007	W 0.33OHM,K, 5W	
R854	D0D5R33KA007	W 0.33OHM,K, 5W	
R858	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R859	ERDS1TJ182	C 1.8OHM,J, 1/2W	
R860	ERJ3GEYJ182	M 1.8KOHM,J,1/16W	
R866	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R870	ERDS2TJ182	C 1.8KOHM,J, 1/4W	
R871	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R878	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R879	ER0S2CHF1961	M1.96KOHM,F, 1/4W	
R880	ERJ3GEY0R00	M 0OHM,J,1/16W	
R881	ERJ3GEYJ682	M 6.8KOHM,J,1/16W	
R882	ERJ3GEYJ333	M 33KOHM,J,1/16W	
R883	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R885	ERJ3GEY0R00	M 0OHM,J,1/16W	
R886	ERDS2TJ473	C 47KOHM,J, 1/4W	
R889	ERJ3GEYJ682	M 6.8KOHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R891	ERDS2TJ473	C 47KOHM,J, 1/4W	
R892	ERDS2TJ102	C 1KOHM,J, 1/4W	
R893	ERC14GK824	S 820KOHM,K, 1/4W	
R901	ERDS1FJ102	C 1KOHM,J, 1/2W	
R902	ERJ3GEYJ333	M 33KOHM,J,1/16W	
R903	ERJ3GEYJ183	M 18KOHM,J,1/16W	
R904	ERJ3GEYJ682	M 6.8KOHM,J,1/16W	
R905	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R906	ERJ3GEYJ271	M 270OHM,J,1/16W	
R907	ERJ3GEYJ510	M 51OHM,J,1/16W	
R908	ERJ3GEYJ391	M 390OHM,J,1/16W	
R909	ERJ3GEYJ271	M 270OHM,J,1/16W	
R950	ERQ1CJP331S	F 330OHM,J, 1W	
R952	ERDS2TJ561	C 560OHM,J, 1/4W	
R953	ERJ3GEYJ271	M 270OHM,J,1/16W	
R954	ERDS1FJ561	C 560OHM,J, 1/2W	
R955	ERJ3GEYJ271	M 270OHM,J,1/16W	
R956	ERDS1FJ561	C 560OHM,J, 1/2W	
R957	ERDS1TJ330	C 33OHM,J, 1/2W	
R958	ERDS1TJ330	C 33OHM,J, 1/2W	
R960	ERQ14AJ100E	F 10OHM,J, 1/4W	
R962	ERQ14AJ120E	F 12OHM,J, 1/4W	
R963	ERQ14AJ120E	F 12OHM,J, 1/4W	
R964	ERJ3GEYJ122	M 1.2KOHM,J,1/16W	
R965	ERJ3GEYJ243	M 24KOHM,J,1/16W	
R966	ERG3FJ151H	M 150OHM,J, 3W	
R967	ERJ3GEYJ243	M 24KOHM,J,1/16W	
R968	ERJ3GEYJ122	M 1.2KOHM,J,1/16W	
R969	ERDS1FJ390	C 39OHM,J, 1/2W	
R970	ERJ3GEYJ2R7	M 2.7OHM,J,1/16W	
R971	ERJ3GEYJ2R7	M 2.7OHM,J,1/16W	
R972	ERDS1FJ390	C 39OHM,J, 1/2W	
R973	ERDS1FJ121	C 120OHM,J, 1/2W	
R975	ERDS1TJ104	C 100KOHM,J, 1/2W	
R976	ERJ3EKF1002	M 10KOHM,F,1/16W	
R977	ERJ3EKF4701	M 4.7KOHM,F,1/16W	
R1051	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1053	ERJ3GEYJ470	M 47OHM,J,1/16W	
R1054	ER0S2CHF3740	M 374OHM,F, 1/4W	
R1055	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R1056	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R1169	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R1170	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R1171	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R1172	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R1173	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R1174	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R1176	ERJ3GEYJ100	M 10OHM,J,1/16W	
R1178	ERJ3GEYJ100	M 10OHM,J,1/16W	
R1182	EXB38V680J	RESISTOR ARRAY	
R1183	EXB38V680J	RESISTOR ARRAY	
R1184	EXB38V680J	RESISTOR ARRAY	
R1185	EXB38V680J	RESISTOR ARRAY	
R1188	ERJ3GEYJ680	M 68OHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R1190	EXB38V680J	RESISTOR ARRAY	
R1193	EXB38V680J	RESISTOR ARRAY	
R1195	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R1196	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R1198	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R1199	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R1201	ERJ3EKF2202	M 22KOHM,F,1/16W	
R1202	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R1210	ERJ3GEYJ473	M 47KOHM,J,1/16W	
R1211	ERJ3GEYJ473	M 47KOHM,J,1/16W	
R1212	ERJ3GEYJ473	M 47KOHM,J,1/16W	
R1213	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R1214	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R1215	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R1216	ERDS2TJ472	C 4.7KOHM,J, 1/4W	
R1217	ERDS2TJ332	C 3.3KOHM,J, 1/4W	
R1218	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1219	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1220	ERJ3GEYJ473	M 47KOHM,J,1/16W	
R1221	ERJ3GEYJ473	M 47KOHM,J,1/16W	
R1222	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R1223	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R1230	ERJ3GEYJ683	M 68KOHM,J,1/16W	
R1231	ERJ3GEYJ223	M 22KOHM,J,1/16W	
R1232	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1233	ERJ3GEYJ121	M 120OHM,J,1/16W	
R1234	ERJ3GEYJ681	M 680OHM,J,1/16W	
R1235	ERJ3GEYJ390	M 39OHM,J,1/16W	
R1253	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1254	ERJ3EKF1581	M1.58KOHM,F,1/16W	
R1255	ERJ3EKF75R0	M 75OHM,F,1/16W	
R1256	ERG1SJ220E	M 22OHM,J, 1W	
R1261	ERJ3EKF1623	M 162KOHM,F,1/16W	
R1262	ERJ3EKF1003	M 100KOHM,F,1/16W	
R1263	ERJ6GEYJ1R0	M 1OHM,J,1/10W	
R1264	ERJ3EKF1242	M12.4KOHM,F,1/16W	
R1268	ERJ3EKF4020	M 402OHM,F,1/16W	
R1269	ERJ3EKF1242	M12.4KOHM,F,1/16W	
R1270	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1271	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R1279	ERJ3EKF1002	M 10KOHM,F,1/16W	
R1280	ERJ3EKF2321	M2.32KOHM,F,1/16W	
R1281	ERJ3EKF2152	M21.5KOHM,F,1/16W	
R1282	ERJ3EKF9091	M9.09KOHM,F,1/16W	
R1283	ERJ3EKF5111	M5.11KOHM,F,1/16W	
R1284	ERJ3EKF3241	M3.24KOHM,F,1/16W	
R1285	ERJ3EKF2211	M2.21KOHM,F,1/16W	
R1286	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R1301	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1302	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R1414	ERJ3GEYJ471	M 470OHM,J,1/16W	
R1416	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1417	ERJ3GEYJ271	M 270OHM,J,1/16W	
R1418	ERJ3GEYJ101	M 100OHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R1419	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1420	ERJ3EKF2701	M 2.7KOHM,F,1/16W	
R1421	ERJ3EKF1101	M 1.1KOHM, 1/16W	
R1422	ERJ3EKF1401	M 1.4KOHM,F,1/16W	
R1423	ERJ3EKF1101	M 1.1KOHM, 1/16W	
R1424	ERJ3EKF1401	M 1.4KOHM,F,1/16W	
R1425	ERJ3EKF1401	M 1.4KOHM,F,1/16W	
R1426	ERJ3EKF1101	M 1.1KOHM, 1/16W	
R1427	ERJ3EKF1401	M 1.4KOHM,F,1/16W	
R1428	ERJ3EKF1101	M 1.1KOHM, 1/16W	
R1429	ERJ3EKF2701	M 2.7KOHM,F,1/16W	
R1430	ERJ3EKF2701	M 2.7KOHM,F,1/16W	
R1432	ERJ3GEYJ221	M 220OHM,J,1/16W	
R1433	ERJ3GEYJ221	M 220OHM,J,1/16W	
R1434	ERJ3GEYJ471	M 470OHM,J,1/16W	
R1435	ERJ3GEYJ470	M 47OHM,J,1/16W	
R1436	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1437	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1440	EXB38V680J	RESISTOR ARRAY	
R1441	EXB38V680J	RESISTOR ARRAY	
R1442	EXB38V680J	RESISTOR ARRAY	
R1443	ERJ3GEYJ680	M 68OHM,J,1/16W	
R1444	EXB38V680J	RESISTOR ARRAY	
R1445	EXB38V680J	RESISTOR ARRAY	
R1446	EXB38V680J	RESISTOR ARRAY	
R1447	ERJ3GEYJ680	M 68OHM,J,1/16W	
R1450	EXB38V680J	RESISTOR ARRAY	
R1451	EXB38V680J	RESISTOR ARRAY	
R1452	EXB38V680J	RESISTOR ARRAY	
R1453	ERJ3GEYJ680	M 68OHM,J,1/16W	
R1454	ERJ3GEYJ680	M 68OHM,J,1/16W	
R1455	EXB38V680J	RESISTOR ARRAY	
R1456	EXB38V680J	RESISTOR ARRAY	
R1457	EXB38V680J	RESISTOR ARRAY	
R1460	ERJ3GEYJ100	M 10OHM,J,1/16W	
R1461	ERJ3GEYJ100	M 10OHM,J,1/16W	
R1462	ERJ3GEYJ100	M 10OHM,J,1/16W	
R1463	ERJ3GEYJ333	M 33KOHM,J,1/16W	
R1464	ERJ3GEYJ333	M 33KOHM,J,1/16W	
R1465	ERJ3GEYJ333	M 33KOHM,J,1/16W	
R1466	ERJ3GEYJ333	M 33KOHM,J,1/16W	
R1467	ERJ3GEYJ333	M 33KOHM,J,1/16W	
R1468	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R1469	ERJ3GEYJ333	M 33KOHM,J,1/16W	
R1473	ERJ3EKF75R0	M 75OHM,F,1/16W	
R1474	ERJ3EKF75R0	M 75OHM,F,1/16W	
R1475	ERJ3EKF75R0	M 75OHM,F,1/16W	
R1479	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1487	ERJ3GEYJ471	M 470OHM,J,1/16W	
R1490	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R1494	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1495	ERJ3GEYJ331	M 330OHM,J,1/16W	
R1496	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R1497	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R1498	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	
R1501	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	
R1502	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	
R1503	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	
R1504	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	
R2340	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R2341	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R2801	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R2803	ERDS2TJ8R2	C 8.2OHM,J, 1/4W	
R2804	ERX2SJR56E	M 0.56OHM,J, 2W	
R2805	ERX2SJR56E	M 0.56OHM,J, 2W	
R2808	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2809	ERJ3GEYJ392	M 3.9KOHM,J,1/16W	
R2813	ERDS2TJ8R2	C 8.2OHM,J, 1/4W	
R2818	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2819	ERJ3GEYJ392	M 3.9KOHM,J,1/16W	
R2832	ERJ3GEYJ471	M 470OHM,J,1/16W	
R2833	ERJ3GEYJ471	M 470OHM,J,1/16W	
R3001	ERJ3GEYJ331	M 330OHM,J,1/16W	
R3002	ERJ3GEYJ750	M 75OHM,J,1/16W	
R3003	ERJ3GEYJ184	M 180KOHM,J,1/16W	
R3004	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R3005	ERJ3GEYJ184	M 180KOHM,J,1/16W	
R3006	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R3007	ERJ3GEYJ221	M 220OHM,J,1/16W	
R3009	ERJ3GEYJ331	M 330OHM,J,1/16W	
R3010	ERJ3GEYJ750	M 75OHM,J,1/16W	
R3011	ERJ3GEYJ331	M 330OHM,J,1/16W	
R3012	ERJ3GEYJ750	M 75OHM,J,1/16W	
R3015	ERJ3GEYJ331	M 330OHM,J,1/16W	
R3016	ERJ3GEYJ750	M 75OHM,J,1/16W	
R3017	ERJ3GEYJ184	M 180KOHM,J,1/16W	
R3018	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R3019	ERJ3GEYJ184	M 180KOHM,J,1/16W	
R3020	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R3021	ERJ3GEY0R00	M 0OHM,J,1/16W	
R3022	ERDS2TJ102	C 1KOHM,J, 1/4W	
R3023	ERJ3GEY0R00	M 0OHM,J,1/16W	
R3031	ERJ3GEYJ223	M 22KOHM,J,1/16W	
R3032	ERJ3GEYJ471	M 470OHM,J,1/16W	
R3033	ERJ3GEYJ223	M 22KOHM,J,1/16W	
R3034	ERJ3GEYJ680	M 68OHM,J,1/16W	
R3035	ERJ3GEYJ181	M 180OHM,J,1/16W	
R3036	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R3037	ERJ3GEYJ101	M 100OHM,J,1/16W	
R3038	ERJ3GEYJ101	M 100OHM,J,1/16W	
R3039	ERJ3GEYJ104	M 100KOHM,J,1/16W	
R3040	ERJ3GEYJ104	M 100KOHM,J,1/16W	
R3041	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R3042	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R3043	ERJ3GEYJ223	M 22KOHM,J,1/16W	
R3044	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R3045	ERJ3GEY0R00	M 0OHM,J,1/16W	
R3046	ERJ3GEY0R00	M 0OHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R3055	ERJ3GEYJ184	M 180KOHM,J,1/16W	
R3056	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R3057	ERJ3GEYJ331	M 330OHM,J,1/16W	
R3058	ERJ3GEYJ750	M 75OHM,J,1/16W	
R3059	ERJ3GEYJ184	M 180KOHM,J,1/16W	
R3060	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R3070	ERJ3GEYJ331	M 330OHM,J,1/16W	
R3075	ERJ3GEY0R00	M 0OHM,J,1/16W	
R3076	ERJ3GEY0R00	M 0OHM,J,1/16W	
R3080	ERJ3GEYJ331	M 330OHM,J,1/16W	
R3081	ERJ3GEYJ750	M 75OHM,J,1/16W	
R3082	ERJ3GEYJ184	M 180KOHM,J,1/16W	
R3083	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R3084	ERJ3GEYJ184	M 180KOHM,J,1/16W	
R4826	ERJ6ENF2213	M 221KOHM, 1/10W	
R4827	ERJ6ENF9091	M9.09KOHM, 1/10W	
R4828	ERJ6ENF6651	M6.65KOHM, 1/10W	
R4829	ERJ6GEYJ102	M 1KOHM,J,1/10W	
R4831	ERDS1FJ220	C 22OHM,J, 1/2W	
R4837	ERJ6GEYJ102	M 1KOHM,J,1/10W	
R4840	ERJ6GEYJ102	M 1KOHM,J,1/10W	
R4841	ERJ6GEYJ102	M 1KOHM,J,1/10W	
R4842	ERJ6GEYJ101	M 100OHM,J,1/10W	
R4843	ERJ6GEYJ471	M 470OHM,J,1/10W	
R4844	ERJ6GEYJ561	M 560OHM,J,1/10W	
R4850	ERJ6GEYJ104	M 100KOHM,J,1/10W	
R4851	ERJ6GEYJ104	M 100KOHM,J,1/10W	
R4852	ERJ6GEYJ104	M 100KOHM,J,1/10W	
R4853	ERJ6GEYJ104	M 100KOHM,J,1/10W	
R4854	ERJ6GEYJ101	M 100OHM,J,1/10W	
R4855	ERJ6GEYJ101	M 100OHM,J,1/10W	
R4856	ERJ6GEYJ102	M 1KOHM,J,1/10W	
R4857	ERJ6GEYJ102	M 1KOHM,J,1/10W	
R4860	ERJ6GEYJ822	M 8.2KOHM,J,1/10W	
R4861	EVMEGSA00B23	VARIABLE RESISTOR	
R4862	ERJ6GEYJ822	M 8.2KOHM,J,1/10W	
R4863	EVMEGSA00B23	VARIABLE RESISTOR	
	CAPACITORS		
C101	ECA1HM100B	E 10UF, 50V	
C102	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C103	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C104	ECA1HM101B	E 100UF, 50V	
C105	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C110	ECJ1VC1H100C	C 10PF, C, 50V	
C111	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C115	ECA1CM221B	E 220UF, 16V	
C121	ECJ1VC1H100C	C 10PF, C, 50V	
C126	ECA0JM471B	E 470UF, 6.3V	
C352	ECJ1VB1H103K	C 0.01UF, K, 50V	
C354	ECJ1VB1E223K	C 0.022UF, K, 25V	
C355	ECQE2104KF	P 0.1UF, K,250V	
C356	ECJ1VC1H030D	C 3PF, D, 50V	
C357	ECKR2H561KB5	C 560PF, K,500V	
C359	ECJ1VF1C104Z	C 0.1UF, Z, 16V	

Ref. No.	Part No.	Part Name & Description	Remarks
C360	ECA1CM470B	E 47UF, 16V	
C361	ECJ1VB1H103K	C 0.01UF, K, 50V	
C363	ECJ1VB1E223K	C 0.022UF, K, 25V	
C364	ECJ1VC1H090D	C 9PF, D, 50V	
C365	ECQE2104KF	P 0.1UF, K,250V	
C366	ECKR2H561KB5	C 560PF, K,500V	
C371	ECJ1VB1H103K	C 0.01UF, K, 50V	
C373	ECJ1VB1H103K	C 0.01UF, K, 50V	
C374	ECJ1VC1H100D	C 10PF, D, 50V	
C375	ECQE2104KF	P 0.1UF, K,250V	
C376	ECKR2H561KB5	C 560PF, K,500V	
C377	ECA2EM100B	E 10UF, 250V	
C380	ECA1HM101B	E 100UF, 50V	
C383	ECA1CM222B	E 2200UF, 16V	
C388	ECJ1VB1E183K	C 0.018UF, K, 25V	
C390	ECA1HM100B	E 10UF, 50V	
C391	ECKW3D332KBP	C 3300PF, K, 2KV	
C401	ECA1HM470B	E 47UF, 50V	
C403	ECJ1VB1H272K	C 2700PF, K, 50V	
C451	ECA1VM470B	E 47UF, 35V	
C452	ECA1HM471B	E 470UF, 50V	
C455	ECEA1CN220U	E 22UF, 16V	
C457	ECA1VHG102	E 1000UF, 35V	
C840	ECKCNA102MB7	C 1000PF, M,	
C841	ECKCNA152ME7	C 1500PF, M,	
C842	ECKCNA152ME7	C 1500PF, M,	
C843	ECKCNA222ME7	C 2200PF, M,	
C844	ECKCNA472ME7	C 4700PF, M,	
C850	ECKW3D182KBP	C 1800PF, K, 2KV	
C851	ECKR2H221KB5	C 220PF, K,500V	
C852	ECKR2H221KB5	C 220PF, K,500V	
C853	ECKR2H221KB5	C 220PF, K,500V	
C854	ECKR2H221KB5	C 220PF, K,500V	
C855	EC0S2CA471BB	E 470UF, 160V	
C856	ECA1EHG102	E 1000UF, 25V	
C857	ECA1CHG682E	E 6800UF, 16V	
C859	F2A1E470A149	E 47UF, 25V	
C862	ECA1CM102B	E 1000UF, 16V	
C863	ECA1CM102B	E 1000UF, 16V	
C864	ECA1EM331B	E 330UF, 25V	
C870	ECJ1VB1H102K	C 1000PF, K, 50V	
C882	ECA1CM101B	E 100UF, 16V	
C883	ECA1CM101B	E 100UF, 16V	
C884	ECJ1VF1H473Z	C 0.047UF, Z, 50V	
C885	EEUFC1C471LB	E 470UF, 16V	
C886	ECA1CM101B	E 100UF, 16V	
C892	ECKW3D152KBP	C 1500PF, K, 2KV	
C897	ECQE6823KF	P 0.082UF, K,630V	
C901	EEANA1E100B	E 10UF, 25V	
C902	ECA1CM101B	E 100UF, 16V	
C905	ECA1VM220B	E 22UF, 35V	
C907	ECJ1VC1H151J	C 150PF, J, 50V	
C955	ECQB1103JF	P 0.01UF, J,100V	
C958	ECA2CM100B	E 10UF, 160V	

Ref. No.	Part No.	Part Name & Description	Remarks
C959	ECQB1103JF	P 0.01UF, J,100V	
C960	ECJ1VC1H221J	C 220PF, J, 50V	
C961	ECA2CM100B	E 10UF, 160V	
C962	ECQM4472RJZ	P 4700PF, J,400V	
C963	ECJ1VC1H221J	C 220PF, J, 50V	
C964	ECA1CMH101	E 100UF, 16V	
C966	ECA1CM101B	E 100UF, 16V	
C967	ECA1CHG471	E 470UF, 16V	
C968	ECA2CM100B	E 10UF, 160V	
C974	ECA1VM101B	E 100UF, 35V	
C1051	ECJ1VC1H101J	C 100PF, J, 50V	
C1052	ECJ1VF1H103Z	C 0.01UF, Z, 50V	
C1053	ECA1CM221B	E 220UF, 16V	
C1060	ECJ1VC1H101J	C 100PF, J, 50V	
C1105	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1106	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1120	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1121	ECJ1VC1H151J	C 150PF, J, 50V	
C1122	EEVHB1C100R	E 10UF, 16V	
C1123	ECJ2VF1C105Z	C 1UF, Z, 16V	
C1130	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1138	ECJ1VB0J105K	C 1UF, K,6.3V	
C1139	EEVHB0G221P	E 220UF, 4V	
C1140	ECJ1VC1H471J	C 470PF, J, 50V	
C1141	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1142	EEVHB1E4R7R	E 4.7UF, 25V	
C1143	EEVHB1E4R7R	E 4.7UF, 25V	
C1151	ECJ1VC1H330J	C 33PF, J, 50V	
C1152	ECJ1VC1H330J	C 33PF, J, 50V	
C1153	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1160	ECJ1VC1H221J	C 220PF, J, 50V	
C1161	ECJ1VC1H221J	C 220PF, J, 50V	
C1332	ECJ1VC1H100D	C 10PF, D, 50V	
C1333	ECJ1VC1H121J	C 120PF, J, 50V	
C1334	EEVHP1H1R0R	E 1UF, 50V	
C1335	ECJ1VC1H101J	C 100PF, J, 50V	
C1336	ECJ1VC1H100D	C 10PF, D, 50V	
C1337	ECJ1VC1H121J	C 120PF, J, 50V	
C1338	EEVHP1E220P	E 22UF, 25V	
C1339	ECJ1VC1H101J	C 100PF, J, 50V	
C1340	ECJ1VC1H121J	C 120PF, J, 50V	
C1341	ECJ1VC1H100D	C 10PF, D, 50V	
C1342	ECJ1VC1H220J	C 22PF, J, 50V	
C1343	ECJ1VC1H680J	C 68PF, J, 50V	
C1344	EEVHB1C470P	E 47UF, 16V	
C1345	ECJ2VF1C105Z	C 1UF, Z, 16V	
C1346	ECJ1VB0J105K	C 1UF, K,6.3V	
C1347	ECJ1VB0J105K	C 1UF, K,6.3V	
C1348	ECJ1VB0J105K	C 1UF, K,6.3V	
C1349	ECJ1VB0J105K	C 1UF, K,6.3V	
C1350	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1351	ECJ1VB0J105K	C 1UF, K,6.3V	
C1353	EEVHB1C100R	E 10UF, 16V	
C1354	EEVHB0G221P	E 220UF, 4V	

Ref. No.	Part No.	Part Name & Description	Remarks
C1355	ECJ1VB0J105K	C 1UF, K,6.3V	
C1356	ECJ1VB0J105K	C 1UF, K,6.3V	
C1357	EEVHB0G221P	E 220UF, 4V	
C1358	ECJ1VB0J105K	C 1UF, K,6.3V	
C1359	ECJ1VB0J105K	C 1UF, K,6.3V	
C1360	EEVHB0G221P	E 220UF, 4V	
C1361	ECJ1VB0J105K	C 1UF, K,6.3V	
C1362	ECJ1VB0J105K	C 1UF, K,6.3V	
C1363	ECJ1VB0J105K	C 1UF, K,6.3V	
C1364	EEVHB1C470P	E 47UF, 16V	
C1365	EEVHB1C100R	E 10UF, 16V	
C1366	ECJ1VC1H681J	C 680PF, J, 50V	
C1367	ECJ1VB0J105K	C 1UF, K,6.3V	
C1368	ECJ1VB0J105K	C 1UF, K,6.3V	
C1370	ECJ1VC1H330J	C 33PF, J, 50V	
C1371	ECJ1VC1H680J	C 68PF, J, 50V	
C1372	ECJ1VB1H103K	C 0.01UF, K, 50V	
C1373	EEVHB0J101P	E 100UF, 6.3V	
C1374	ECJ1VB0J105K	C 1UF, K,6.3V	
C1375	ECJ1VB0J105K	C 1UF, K,6.3V	
C1376	ECJ1VB0J105K	C 1UF, K,6.3V	
C1377	ECJ1VC1H221J	C 220PF, J, 50V	
C1378	ECJ1VC1H220J	C 22PF, J, 50V	
C1379	ECJ1VC1H680J	C 68PF, J, 50V	
C1380	ECJ1VC1H220J	C 22PF, J, 50V	
C1381	ECJ1VC1H680J	C 68PF, J, 50V	
C1382	ECJ1VC1H101J	C 100PF, J, 50V	
C1383	ECJ1VC1H101J	C 100PF, J, 50V	
C1384	EEVHB1C100R	E 10UF, 16V	
C1385	EEVHB1C470P	E 47UF, 16V	
C1386	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1387	ECJ1VB0J105K	C 1UF, K,6.3V	
C1388	ECJ1VB1H103K	C 0.01UF, K, 50V	
C1392	ECJ1VB1C223K	C 0.022UF, K, 16V	
C1394	ECJ1VB0J105K	C 1UF, K,6.3V	
C1401	ECJ1VB0J105K	C 1UF, K,6.3V	
C1402	ECJ3YB0J335M	C 3.3UF, M,6.3V	
C1403	ECJ1VB1H123K	C 0.012UF, K, 50V	
C1404	EEVHB0G221P	E 220UF, 4V	
C1405	ECJ1VB0J105K	C 1UF, K,6.3V	
C1406	ECJ1VB0J105K	C 1UF, K,6.3V	
C1497	ECJ1VB1H103K	C 0.01UF, K, 50V	
C1498	ECHU1C104JB5	P 0.1UF, J, 16V	
C1501	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1502	EEVHB1C100R	E 10UF, 16V	
C1503	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1504	EEVHB1C100R	E 10UF, 16V	
C1505	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1506	EEVHB0G221P	E 220UF, 4V	
C1507	EEVHB0G221P	E 220UF, 4V	
C1512	EEVHB1C470P	E 47UF, 16V	
C1513	EEVHB1C100R	E 10UF, 16V	
C1514	EEVHB0G221P	E 220UF, 4V	
C1515	ECJ1VB0J105K	C 1UF, K,6.3V	

Ref. No.	Part No.	Part Name & Description	Remarks
C1550	EEVHB1C100R	E 10UF, 16V	
C1570	ECJ2VF1C105Z	C 1UF, Z, 16V	
C1580	ECJ1VB0J105K	C 1UF, K,6.3V	
C1601	ECJ1VB0J105K	C 1UF, K,6.3V	
C1602	ECJ1VB0J105K	C 1UF, K,6.3V	
C1603	ECJ1VB0J105K	C 1UF, K,6.3V	
C1604	ECJ1VB1C104K	C 0.1UF, K, 16V	
C1605	ECJ1VB1H103K	C 0.01UF, K, 50V	
C1606	EEVHB1C470P	E 47UF, 16V	
C1607	ECJ1VB1H103K	C 0.01UF, K, 50V	
C2101	ECA1CM101B	E 100UF, 16V	
C2102	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2103	ECJ1VC1H101J	C 100PF, J, 50V	
C2110	ECJ1VB1H332K	C 3300PF, K, 50V	
C2111	ECJ1VB1H332K	C 3300PF, K, 50V	
C2112	ECJ1VC1H102J	C 1000PF, J, 50V	
C2113	ECA1HM100B	E 10UF, 50V	
C2114	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2115	ECA1HM100B	E 10UF, 50V	
C2116	ECA1CM101B	E 100UF, 16V	
C2117	ECJ1VF1H103Z	C 0.01UF, Z, 50V	
C2118	ECJ1VF1H103Z	C 0.01UF, Z, 50V	
C2120	ECA1HM3R3B	E 3.3UF, 50V	
C2121	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2124	ECA1HM100B	E 10UF, 50V	
C2125	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2127	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2128	ECA1CM101B	E 100UF, 16V	
C2129	ECQV1H334JM	P 0.33UF, J, 50V	
C2130	ECQV1H334JM	P 0.33UF, J, 50V	
C2131	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C2133	ECJ1VC1H070D	C 7PF, D, 50V	
C2134	ECJ1VC1H470J	C 47PF, J, 50V	
C2135	ECJ1VC1H560J	C 56PF, J, 50V	
C2136	ECJ1VC1H560J	C 56PF, J, 50V	
C2138	ECJ1VC1H470J	C 47PF, J, 50V	
C2139	ECJ1VC1H010C	C 1PF, C, 50V	
C2140	ECJ1VC1H010C	C 1PF, C, 50V	
C2301	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C2302	ECJ1VC1H561K	C 560PF, K, 50V	
C2303	ECQV1H684JM	P 0.68UF, J, 50V	
C2304	ECQV1H334JM	P 0.33UF, J, 50V	
C2305	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C2306	ECA1VM221B	E 220UF, 35V	
C2307	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C2308	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C2309	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C2310	ECA1HM221B	E 220UF, 50V	
C2315	ECJ1VB1H472K	C 4700PF, K, 50V	
C2316	ECJ1VC1H101J	C 100PF, J, 50V	
C3070	ECJ2VF1C105Z	C 1UF, Z, 16V	
C3071	ECA1HM2R2B	E 2.2UF, 50V	
C3072	ECA1HM2R2B	E 2.2UF, 50V	
C3080	ECJ2VF1C105Z	C 1UF, Z, 16V	

Ref. No.	Part No.	Part Name & Description	Remarks
C3081	ECA1HM2R2B	E 2.2UF, 50V	
C3082	ECJ1VB1H682K	C 6800PF, K, 50V	
C3083	ECA1HM2R2B	E 2.2UF, 50V	
C3084	ECJ1VB1H682K	C 6800PF, K, 50V	
C3085	ECJ2VF1C105Z	C 1UF, Z, 16V	
C3086	ECJ1VF1C474Z	C 0.47UF, Z, 16V	
C3087	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C3101	ECJ1VC1H561K	C 560PF, K, 50V	
C3102	ECJ1VC1H561K	C 560PF, K, 50V	
C3103	ECJ1VF1H103Z	C 0.01UF, Z, 50V	
C3150	ECJ1VB0J105K	C 1UF, K,6.3V	
C3301	ECJ2VF1C105Z	C 1UF, Z, 16V	
C3302	ECJ1VF1C474Z	C 0.47UF, Z, 16V	
C3304	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3308	ECA1CM221B	E 220UF, 16V	
C3311	ECJ2VF1C105Z	C 1UF, Z, 16V	
C3312	ECJ2VF1C105Z	C 1UF, Z, 16V	
C3313	ECJ2VF1C105Z	C 1UF, Z, 16V	
C3314	ECJ1VF1C104Z	C 0.1UF, Z, 16V	
C3315	ECJ2VF1C105Z	C 1UF, Z, 16V	
C3316	ECJ2VF1C105Z	C 1UF, Z, 16V	
C3317	ECJ2VF1C105Z	C 1UF, Z, 16V	
C3318	ECA1CM221B	E 220UF, 16V	
C3320	ECJ2VF1C105Z	C 1UF, Z, 16V	
C3321	ECJ2VF1C105Z	C 1UF, Z, 16V	
C3322	ECJ2VF1C105Z	C 1UF, Z, 16V	
C4801	ECA1HM4R7B	E 4.7UF, 50V	
C4803	ECQV1H334JM	P 0.33UF, J, 50V	
C4804	ECQV1H334JM	P 0.33UF, J, 50V	
C4805	ECA1VM470B	E 47UF, 35V	
C4806	ECA1HM4R7B	E 4.7UF, 50V	
C4808	ECA1HM330B	E 33UF, 50V	
C4809	ECQV1H334JM	P 0.33UF, J, 50V	
C4810	ECA1VM470B	E 47UF, 35V	
C4811	ECJ2VB1H103K	C 0.01UF, K, 50V	
C4812	ECA1HM100B	E 10UF, 50V	
C4813	ECA1CM101B	E 100UF, 16V	
C4814	ECA1CM101B	E 100UF, 16V	
C4822	ECHU1C103JA5	P 0.01UF, J, 16V	
C4823	ECEA1CN100U	E 10UF, 16V	
C4824	ECEA1CN100U	E 10UF, 16V	
C4825	EEUFC1C560B	E 56UF, 16V	
C4826	ECA1HM4R7B	E 4.7UF, 50V	
C4827	ECA1HM4R7B	E 4.7UF, 50V	
C4828	ECQV1H334JM	P 0.33UF, J, 50V	
	COILS		
L102	EXCELDR35V	CORE	
L103	EXCELDR35V	CORE	
L107	EXC3BB221H	CHIP BEAD CORE	
L110	EXCELSA35T	BEAD CORE	
L115	EXCELSA35T	BEAD CORE	
L116	EXCELSA35T	BEAD CORE	
L351	EXCELSA24T	BEAD CORE	
L352	EXCELDR35V	CORE	

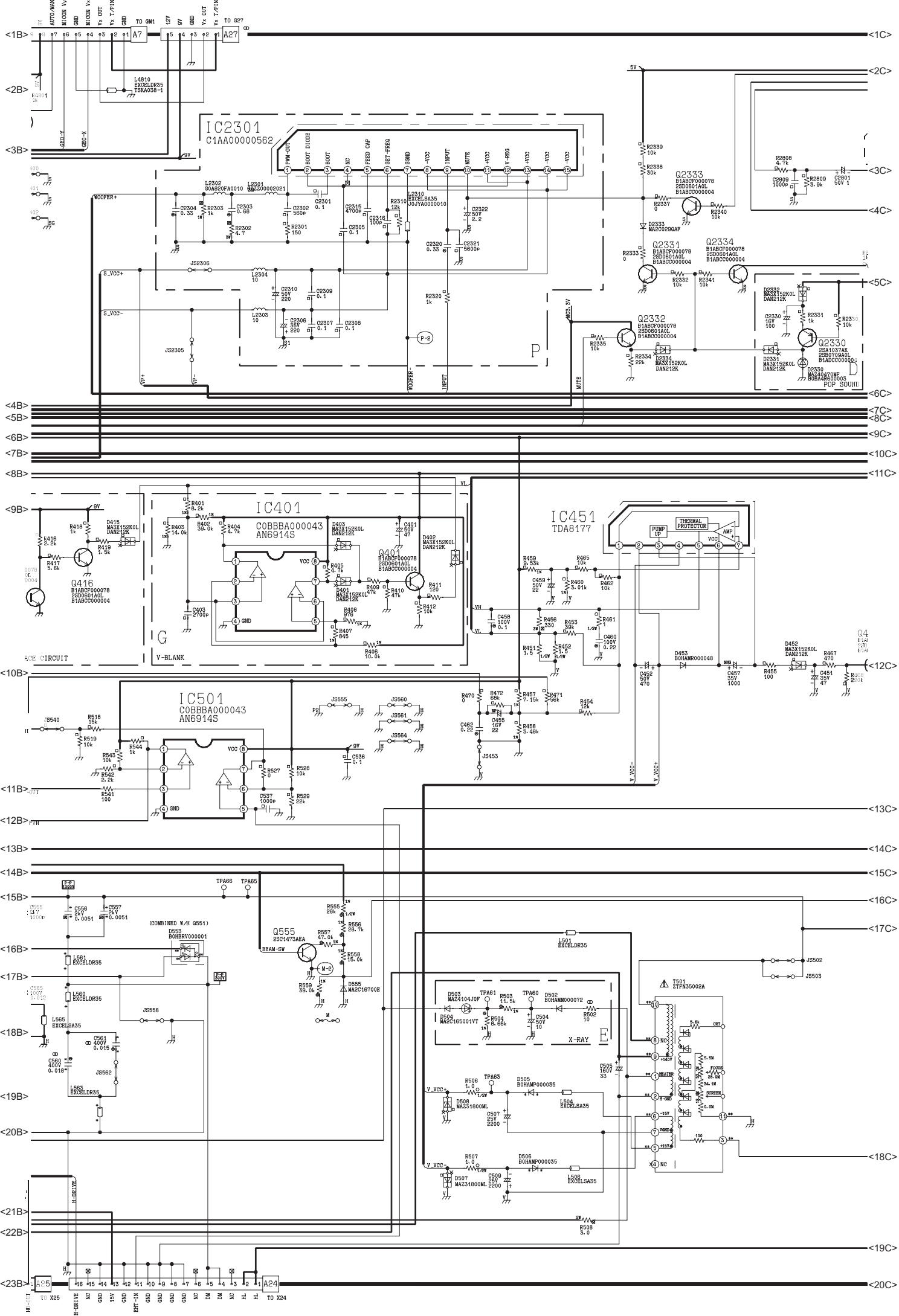
Ref. No.	Part No.	Part Name & Description	Remarks
L381	TLTACT6R8J	PEAKING COIL	
L382	TLTACT6R8J	PEAKING COIL	
L383	TLTACT150J	PEAKING COIL	
L387	EXCELDR35V	CORE	
L388	EXCELSA39V	BEAD CORE	
L1375	TALC325T4R7M	CHIP INDUCTOR COIL	
L1378	G1C1R5K00004	COIL	
L1379	G1C1R5K00004	COIL	
L1384	TALC325T4R7M	CHIP INDUCTOR COIL	
L1385	TALC325T4R7M	CHIP INDUCTOR COIL	
L1390	TALC325T4R7M	CHIP INDUCTOR COIL	
L1401	TALC325T4R7M	CHIP INDUCTOR COIL	
L1402	TALC325T4R7M	CHIP INDUCTOR COIL	
L1403	TALC325T4R7M	CHIP INDUCTOR COIL	
L1430	TALC325T4R7M	CHIP INDUCTOR COIL	
L1440	TALC325T4R7M	CHIP INDUCTOR COIL	
L1450	TALC325T4R7M	CHIP INDUCTOR COIL	
L1460	TALC325T4R7M	CHIP INDUCTOR COIL	
L1491	TALC325T4R7M	CHIP INDUCTOR COIL	
L1492	TALC325T4R7M	CHIP INDUCTOR COIL	
L1495	TALC325T4R7M	CHIP INDUCTOR COIL	
L1501	TALC325T4R7M	CHIP INDUCTOR COIL	
L1580	TALC325T4R7M	CHIP INDUCTOR COIL	
L2101	TLTACT100K	PEAKING COIL 10U	
L2130	EXCELSA35T	BEAD CORE	
L2132	G0C6R8KA0004	PEAKING COIL	
L2133	TLTACT100K	PEAKING COIL 10U	
L2301	G0ZZ00002021	COIL	
L2302	G0A820FA0010	COIL	
L2303	TLTACT100K	PEAKING COIL 10U	
L2304	TLTACT100K	PEAKING COIL 10U	
L2310	EXCELSA35T	BEAD CORE	
L2801	G0BYYYY00016	COIL	
L2820	TLTACT100K	PEAKING COIL 10U	
L2821	TLTACT100K	PEAKING COIL 10U	
L2830	EXCELSA35T	BEAD CORE	
L2831	EXCELSA35T	BEAD CORE	
L3030	TLTACT100J	PEAKING COIL	
L3050	TLTACT100J	PEAKING COIL	
L3151	TLTACT4R7J	PEAKING COIL	
L3301	TLTACT100J	PEAKING COIL	
L3311	TLTACT100J	PEAKING COIL	
L4802	EXCELDR35V	CORE	
L4803	TLTACT100J	PEAKING COIL	
L4804	TALL08T102JA	INDUCTION COIL	
L4810	EXCELDR35V	CORE	
LC1345	J0HAAB000012	EMI FILTER	
LC1346	J0HAAB000012	EMI FILTER	
LC1350	J0HAAB000012	EMI FILTER	
LC1351	J0HAAB000012	EMI FILTER	
LC1352	J0HAAB000012	EMI FILTER	
LC1501	J0HABB000004	EMI FILTER	
LC1502	J0HABB000004	EMI FILTER	
LC1503	J0HABB000004	EMI FILTER	

Ref. No.	Part No.	Part Name & Description	Remarks
LC1504	J0HABB000004	EMI FILTER	
LC1507	J0HABB000003	EMI FILTER	
LC1508	J0HABB000003	EMI FILTER	
LC1509	J0HAAB000012	EMI FILTER	
LC1510	J0HAAB000012	EMI FILTER	
LC1511	J0HABB000003	EMI FILTER	
LC1514	J0HAAB000012	EMI FILTER	
LC1516	J0HAAB000012	EMI FILTER	
LC1517	ELKE103FA	NOISE FILTER	
LC1518	ELKE103FA	NOISE FILTER	
LC1519	ELKE103FA	NOISE FILTER	
LC1520	ELKE103FA	NOISE FILTER	
LC1521	ELKE103FA	NOISE FILTER	
LC1522	J0HAAB000012	EMI FILTER	
D527	MA152KTX	DIODE	
D530	MA165	DIODE	
D532	MA4360H	DIODE	
D534	MA182	DIODE	
D535	MA182	DIODE	
D545	B0JAME000052	DIODE	
D547	MA4150M	DIODE	
D548	D1NL40V70	DIODE	
D551	EU02	DIODE	
D552	RH3GLF102	DIODE	
D553	FMV-3GULF730	DIODE	
D555	MA167	DIODE	
D566	MTZJ51	ZENER DIODE	
D567	MTZJ51	ZENER DIODE	
D568	MA165	DIODE	
D569	MA4020H	DIODE	
D570	MAZ30560LL	ZENER DIODE	
D571	MAZ30560LL	ZENER DIODE	
D572	MAZ30560LL	ZENER DIODE	
D581	RU3ANLFA1	DIODE	
D701	D1NL40V70	DIODE	
D801	ERZV10D621CS	VARISTOR	⚠
D803	D4SB80	DIODE	
D811	B0BA02100001	ZENER DIODE	
D812	B0BA02100001	ZENER DIODE	
D813	B0BA02100001	ZENER DIODE	
D814	B0EAKT000018	DIODE	
D817	AG01Z	DIODE	
D818	MAZ2360	DIODE	
D821	MAZ20820A0LS	DIODE	
D824	AG01Z	DIODE	
D825	MAZ20820A0LS	DIODE	
D826	MAZ20820A0LS	DIODE	
D827	MTZJ20B	ZENER DIODE	
D832	MTZJ5.6A	ZENER DIODE	
D833	MTZJ51	ZENER DIODE	
D850	FMGG2CSLF665	DIODE	
D851	FMLG12SLF116	DIODE	
D852	FMLG12SLF116	DIODE	
D853	RU4AMLF-M1	DIODE	

Ref. No.	Part No.	Part Name & Description	Remarks
D854	RU4AMLF-M1	DIODE	
D860	TLP721FD4GR	PHOTO COUPLER	⚠
D861	MTZJ20D	ZENER DIODE	
D863	MA4030L	DIODE	
D870	MAZ40240HF	ZENER DIODE	
D890	D4DDD1200001	POSISTOR	⚠
D891	D4DDD1200001	POSISTOR	⚠
D892	MA165	DIODE	
D953	SR2KNLFA1	DIODE	
D961	MA152KTX	DIODE	
D975	B0BA8R700009	ZENER DIODE	
D1051	LNH201RGRF5	LED	
D1053	MTZJ5.6B	ZENER DIODE	
D1250	RK34LFC4	DIODE	
D1251	MA704ATX	DIODE	
D1252	MAZ30390LL	ZENER DIODE	
D1253	MAZ30330LL	ZENER DIODE	
D1440	MA152KTX	DIODE	
D1511	MA152KTX	DIODE	
D2101	MTZJ5.6A	ZENER DIODE	
D2102	MTZJ5.6A	ZENER DIODE	
D2330	MA4047M	DIODE	
D2331	MA152KTX	DIODE	
	TRANSISTORS		
Q112	2SA1037AKT	TRANSISTOR	
Q369	2SA1037AKT	TRANSISTOR	
Q401	B1ABCF000078	TRANSISTOR	
Q415	B1ABCF000078	TRANSISTOR	
Q416	B1ABCF000078	TRANSISTOR	
Q451	B1ABCF000078	TRANSISTOR	
Q510	2SA1018Q	TRANSISTOR	
Q513	2SA1018Q	TRANSISTOR	
Q540	2SK2962	TRANSISTOR	
Q551	2SC5591000LK	TRANSISTOR	
Q555	2SC1473A	TRANSISTOR	
Q565	2SC3311A	TRANSISTOR	
Q575	2SA1037AKT	TRANSISTOR	
Q576	B1ABCF000078	TRANSISTOR	
Q577	B1ABCF000078	TRANSISTOR	
Q703	2SK2538000	TRANSISTOR	
Q810	2SC1473A	TRANSISTOR	
Q851	2SA1037AKT	TRANSISTOR	
Q870	B1ABCF000078	TRANSISTOR	
Q872	B1ABCF000078	TRANSISTOR	
Q873	B1ABCF000078	TRANSISTOR	
Q874	2SB1030A	TRANSISTOR	
Q880	B1ABCF000078	TRANSISTOR	
Q891	2SC3311AS	TRANSISTOR	
Q892	2SC1317	TRANSISTOR	
Q902	B1ABCF000078	TRANSISTOR	
Q903	B1ABCF000078	TRANSISTOR	
Q908	B1ABCF000078	TRANSISTOR	
Q952	B1ABCF000078	TRANSISTOR	

Ref. No.	Part No.	Part Name & Description	Remarks
Q953	B1ABCF000078	TRANSISTOR	
Q954	2SA1037AKT	TRANSISTOR	
Q955	2SA1535ARLB	TRANSISTOR	
Q956	2SC3944ARLB	TRANSISTOR	
Q975	2SB14880QA	TRANSISTOR	
Q976	2SC54190RA	TRANSISTOR	
Q1051	B1ABCF000078	TRANSISTOR	
Q1060	B1ABCF000078	TRANSISTOR	
Q1130	B1ABCF000078	TRANSISTOR	
Q1131	2SA1037AKT	TRANSISTOR	
Q1150	B1ABCF000078	TRANSISTOR	
Q1230	B1ABCF000078	TRANSISTOR	
Q1231	2SA1037AKT	TRANSISTOR	
Q1301	B1ABCF000078	TRANSISTOR	
Q1302	B1ABCF000078	TRANSISTOR	
Q1303	B1ABCF000078	TRANSISTOR	
Q1335	2SA1037AKT	TRANSISTOR	
Q1336	2SA1037AKT	TRANSISTOR	
Q1337	2SA1037AKT	TRANSISTOR	
Q1365	2SD10300TL	TRANSISTOR	
Q1366	2SD10300TL	TRANSISTOR	
Q1375	2SA1037AKT	TRANSISTOR	
Q1376	2SA1037AKT	TRANSISTOR	
Q1380	2SA1037AKT	TRANSISTOR	
Q1381	B1ABCF000078	TRANSISTOR	
Q1390	B1ABCF000078	TRANSISTOR	
Q1430	2SA1037AKT	TRANSISTOR	
Q1490	B1ABCF000078	TRANSISTOR	
Q1553	B1ABCF000078	TRANSISTOR	
Q1554	B1ABCF000078	TRANSISTOR	
Q1555	B1ABCF000078	TRANSISTOR	
Q1601	B1ABCF000078	TRANSISTOR	
Q1602	B1ABCF000078	TRANSISTOR	
JS540	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS857	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1101	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1102	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1103	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1104	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1105	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1106	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1107	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1108	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1109	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1110	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1150	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1320	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1321	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1322	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1338	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1360	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1361	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1362	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1370	ERJ3GEY0R00	M 0OHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
JS1371	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1372	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1386	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1387	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1401	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1402	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1403	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1420	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1421	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1422	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1430	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1431	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1432	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1512	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1513	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1515	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1524	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1525	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1526	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1531	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1539	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1540	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1549	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS1601	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS2119	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS2120	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS2121	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS2150	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS2814	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS2830	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS2831	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3001	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3002	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3003	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3004	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3011	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3012	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3013	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3014	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3015	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3031	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3032	ERJ3GEY0R00	M 0OHM,J,1/16W	


IC2301
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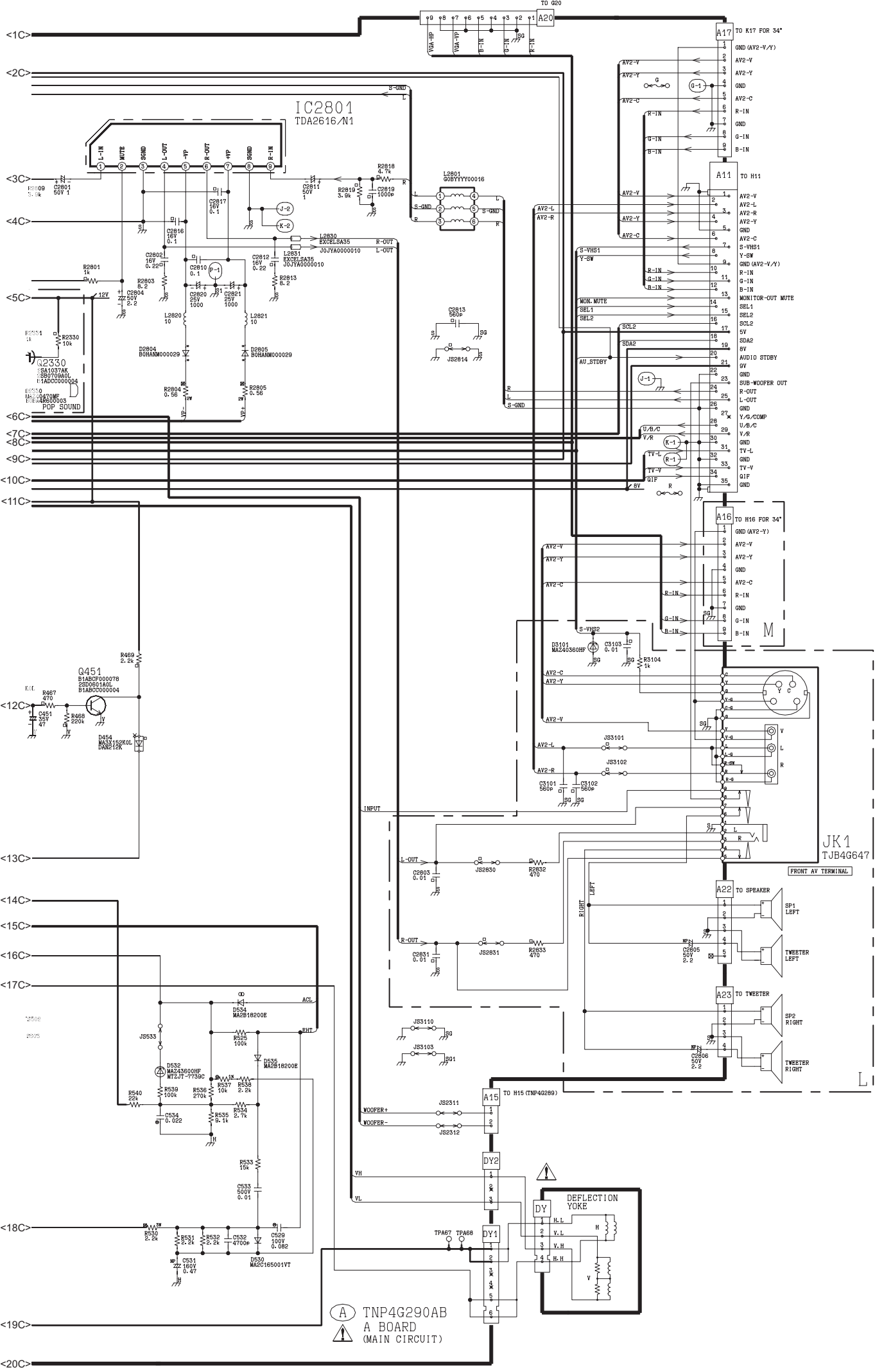
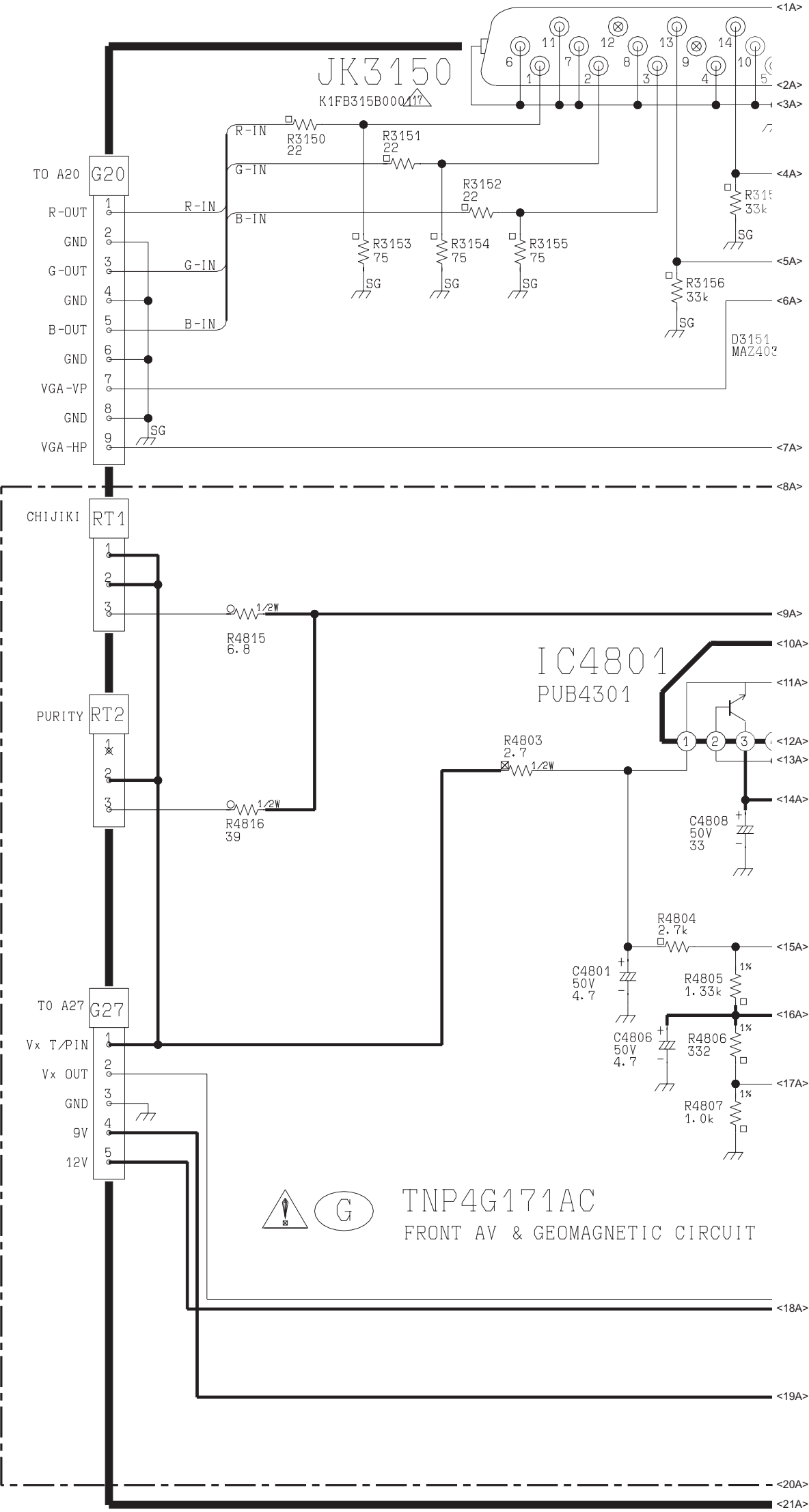
IC401
C0BBBA000043
AN6914S
IC451
TDA8177
IC501
C0BBBA000043
AN6914S
Q2333
Q2334
Q2331
Q2332
Q2330
Q416
Q401
Q555
2SC1473AEA
POP SOUND
X-RAY
V-BLANK
TO GM1
TO Q27
TO X25
TO X24
WOOFER+
WOOFER-
S_VCC+
S_VCC-
VP+
VP-
INPUT
MUTE
(COMBINED W/H Q551)
BEAM-SW


IC2801
TDA2616/N1
L-IN
MUTE
SGND
L-OUT
-VP
R-OUT
+VP
SGND
R-IN
POP SOUND
Q2330
Q451
D454
D2804
D2805
L2830
L2831
L2801
JK1
TJB4G647
FRONT AV TERMINAL
A11
A15
A16
A17
A20
A22
A23
DY
DY1
DY2
DEFLECTION YOKE
TO G20
TO K17 FOR 34"
TO H11
TO H16 FOR 34"
TO H15 (TNP4G289)
TO SPEAKER
TO TWEETER
INPUT
WOOFER+
WOOFER-
SP1 LEFT
TWEETER LEFT
SP2 RIGHT
TWEETER RIGHT
TNP4G290AB
A BOARD
(MAIN CIRCUIT)


JK3150
K1FB315B0001
TO A20
G20
R-OUT
GND
G-OUT
GND
B-OUT
GND
VGA-VP
GND
VGA-HP
R-IN
G-IN
B-IN
R3150
22
R3151
22
R3152
22
R3153
75
R3154
75
R3155
75
R3156
33k
SG
D3151
MAZ4033
CHIJIKI
RT1
PURITY
RT2
R4815
6.8
R4816
39
1/2W
IC4801
PUB4301
R4803
2.7
C4808
50V
33
R4804
2.7k
C4801
50V
4.7
R4805
1.33k
C4806
50V
4.7
R4806
332
R4807
1.0k
1%
TO A27
G27
Vx T/PIN
Vx OUT
GND
9V
12V
TNP4G171AC
FRONT AV & GEOMAGNETIC CIRCUIT
<1A>
<2A>
<3A>
<4A>
<5A>
<6A>
<7A>
<8A>
<9A>
<10A>
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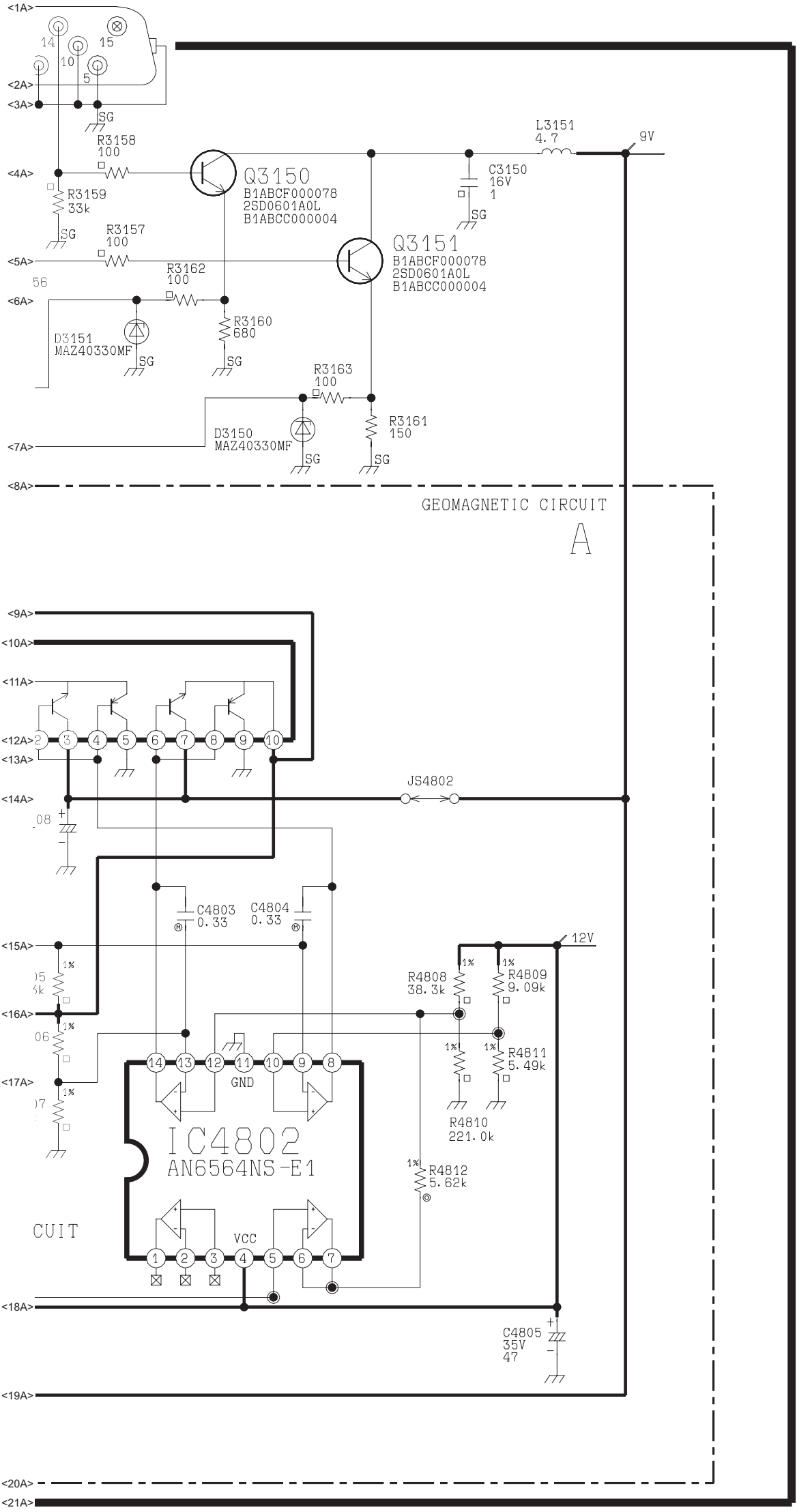
<1A>
14
15
10
5
<2A>
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SG
R3158
100
<4A>
Q3150
B1ABCF000078
2SD0601A0L
B1ABCC000004
L3151
4.7
9V
C3150
16V
1
SG
R3159
33k
SG
R3157
100
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2SD0601A0L
B1ABCC000004
R3162
100
56
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D3151
MAZ40330MF
SG
R3160
680
SG
R3163
100
D3150
MAZ40330MF
SG
R3161
150
SG
<7A>
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GEOMAGNETIC CIRCUIT
A
<9A>
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<12A>
<13A>
JS4802
<14A>
C4803
0.33
C4804
0.33
<15A>
12V
R4808
38.3k
R4809
9.09k
<16A>
R4811
5.49k
R4810
221.0k
<17A>
GND
IC4802
AN6564NS-E1
R4812
5.62k
CUIT
VCC
<18A>
C4805
35V
47
<19A>
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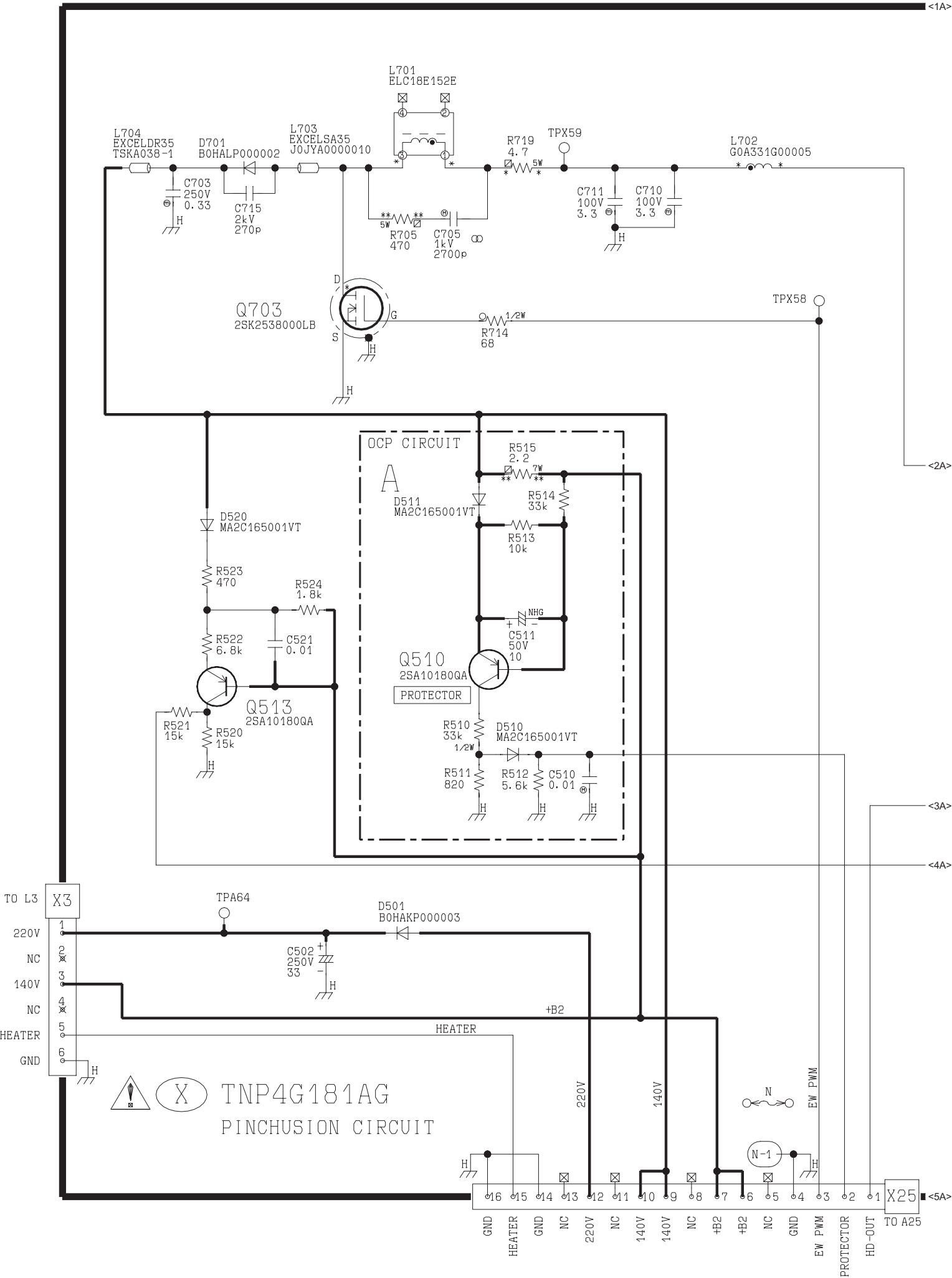
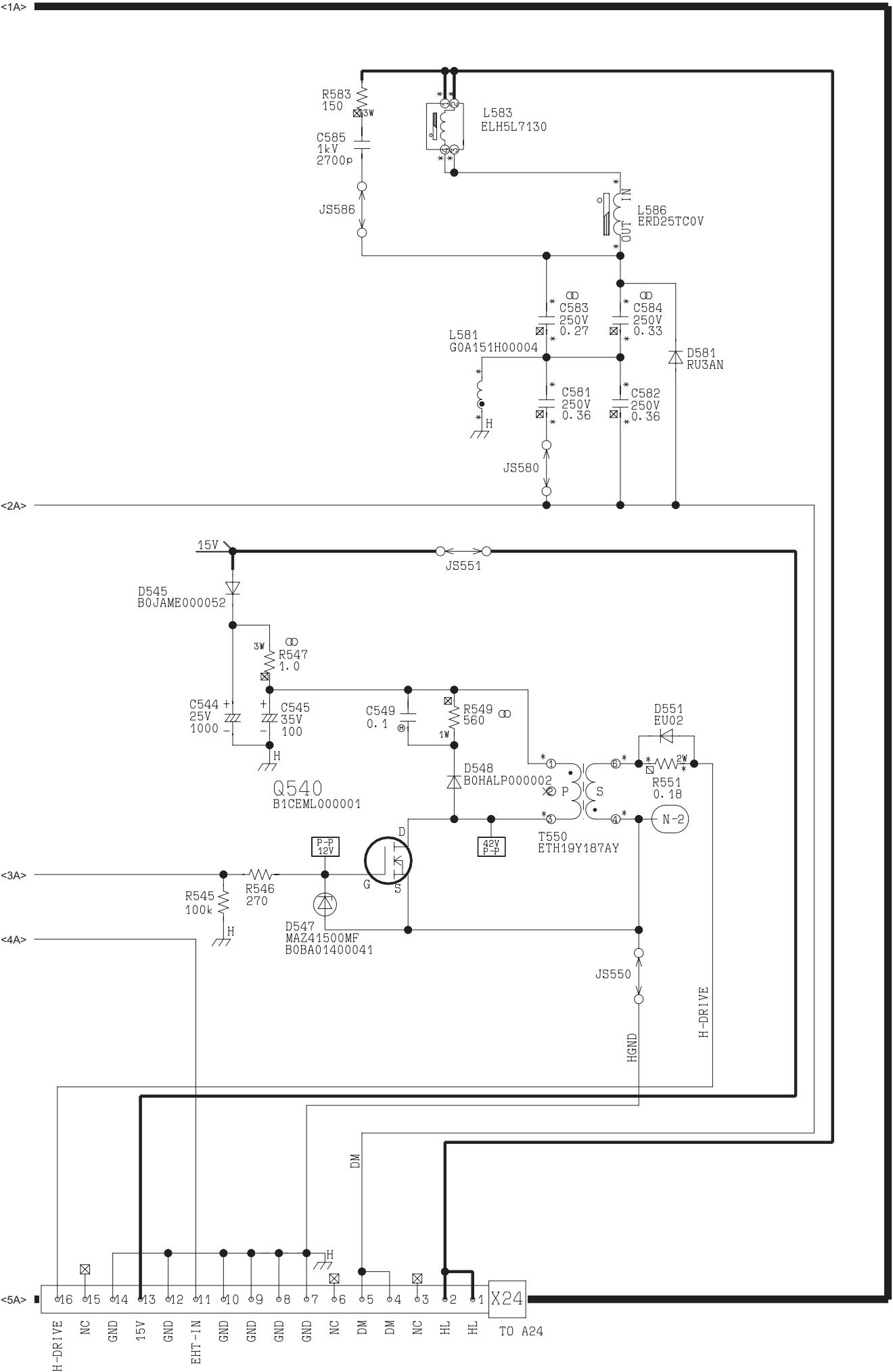
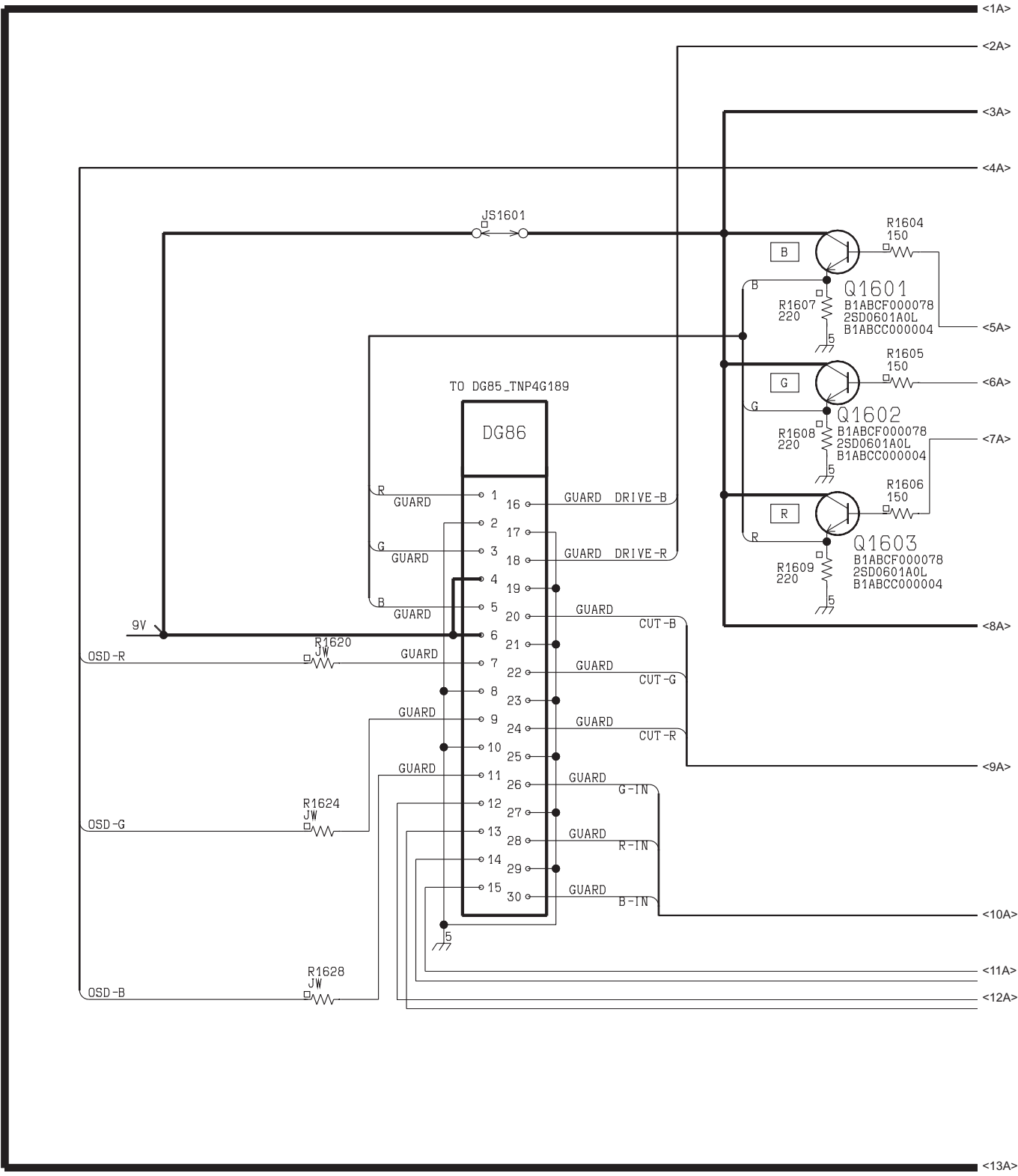

L701
ELC18E152E
L704
EXCELDR35
TSKA038-1
D701
B0HALP000002
L703
EXCELSA35
J0JYA0000010
R719
4.7
5W
TPX59
L702
G0A331G00005
C703
250V
0.33
H
C715
2kV
270p
R705
470
5W
C705
1kV
2700p
C711
100V
3.3
C710
100V
3.3
Q703
2SK2538000LB
D
G
S
R714
68
1/2W
TPX58
<1A>
<2A>
OCP CIRCUIT
A
R515
2.2
7W
D511
MA2C165001VT
R514
33k
R513
10k
D520
MA2C165001VT
R523
470
R524
1.8k
R522
6.8k
C521
0.01
NHG
C511
50V
10
Q510
2SA10180QA
PROTECTOR
Q513
2SA10180QA
R521
15k
R520
15k
R510
33k
1/2W
D510
MA2C165001VT
R511
820
R512
5.6k
C510
0.01
<3A>
<4A>
TO L3
X3
TPA64
D501
B0HAKP000003
220V
NC
140V
NC
HEATER
GND
C502
250V
33
+B2
HEATER
X
TNP4G181AG
PINCHUSION CIRCUIT
220V
140V
N
EW PWM
N-1
X25
<5A>
TO A25
GND
HEATER
GND
NC
220V
NC
140V
140V
NC
+B2
+B2
NC
GND
EW PWM
PROTECTOR
HD-OUT


<1A>
R583
150
3W
C585
1kV
2700p
JS586
L583
ELH5L7130
L586
ERD25TC0V
IN
OUT
C583
250V
0.27
C584
250V
0.33
L581
G0A151H00004
D581
RU3AN
C581
250V
0.36
C582
250V
0.36
H
JS580
<2A>
15V
JS551
D545
B0JAME000052
3W
R547
1.0
C544
25V
1000
C545
35V
100
C549
0.1
R549
560
1W
D551
EU02
2W
R551
0.18
D548
B0HALP000002
Q540
B1CEML000001
P
S
T550
ETH19Y187AY
N-2
P-P
12V
42V
P-P
D
G
S
<3A>
R545
100k
R546
270
D547
MAZ41500MF
B0BA01400041
<4A>
JS550
HGND
H-DRIVE
DM
<5A>
16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
X24
TO A24
H-DRIVE
NC
GND
15V
GND
EHT-IN
GND
GND
GND
GND
NC
DM
DM
NC
HL
HL


JS1601
TO DG85_TNP4G189
DG86
9V
OSD-R
OSD-G
OSD-B
R1620
JW
R1624
JW
R1628
JW
R1604
150
R1605
150
R1606
150
Q1601
Q1602
Q1603
R1607
220
R1608
220
R1609
220
B1ABCF000078
2SD0601A0L
B1ABCC000004
GUARD
GUARD DRIVE-B
GUARD DRIVE-R
GUARD CUT-B
GUARD CUT-G
GUARD CUT-R
GUARD G-IN
GUARD R-IN
GUARD B-IN
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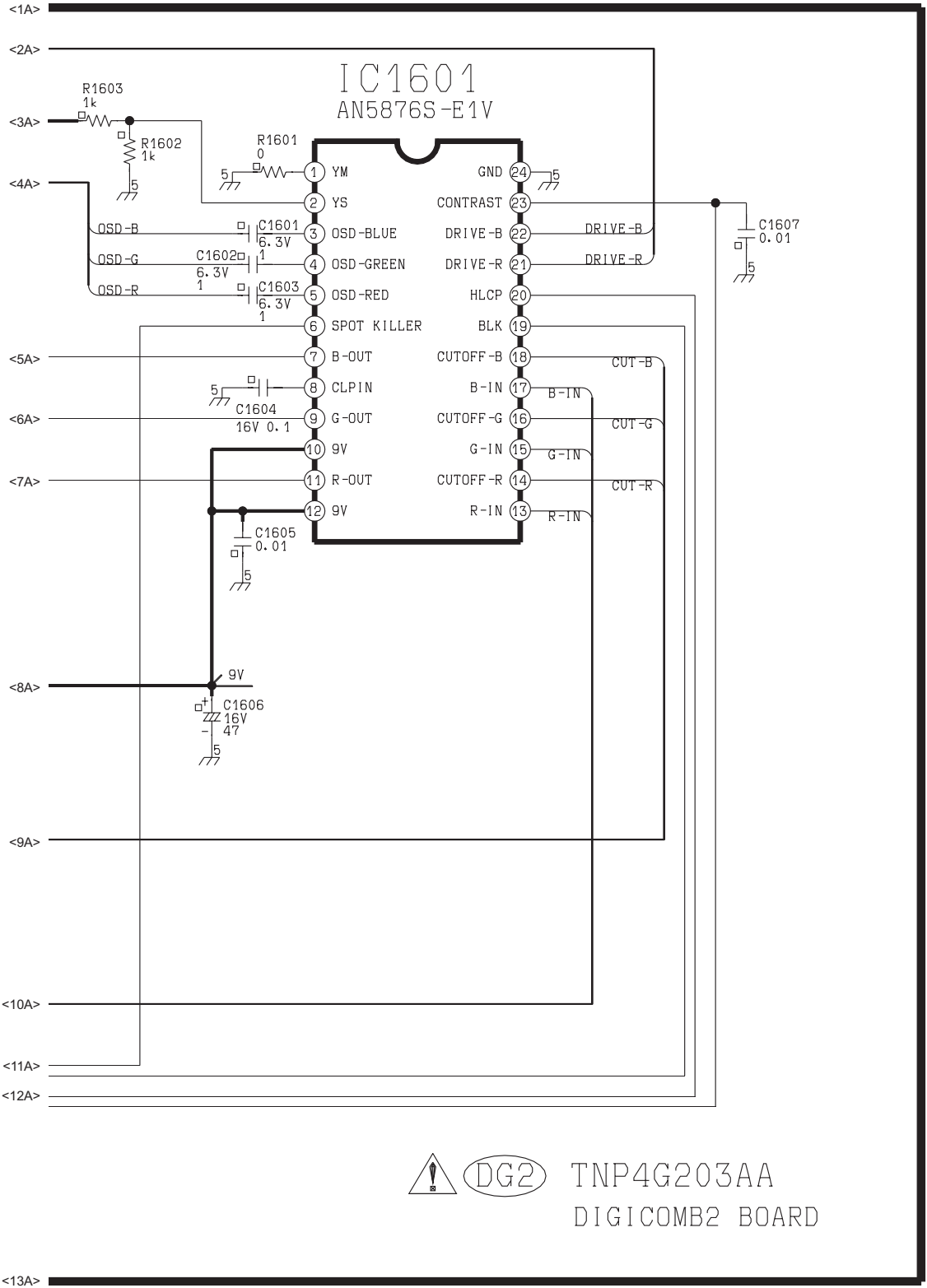
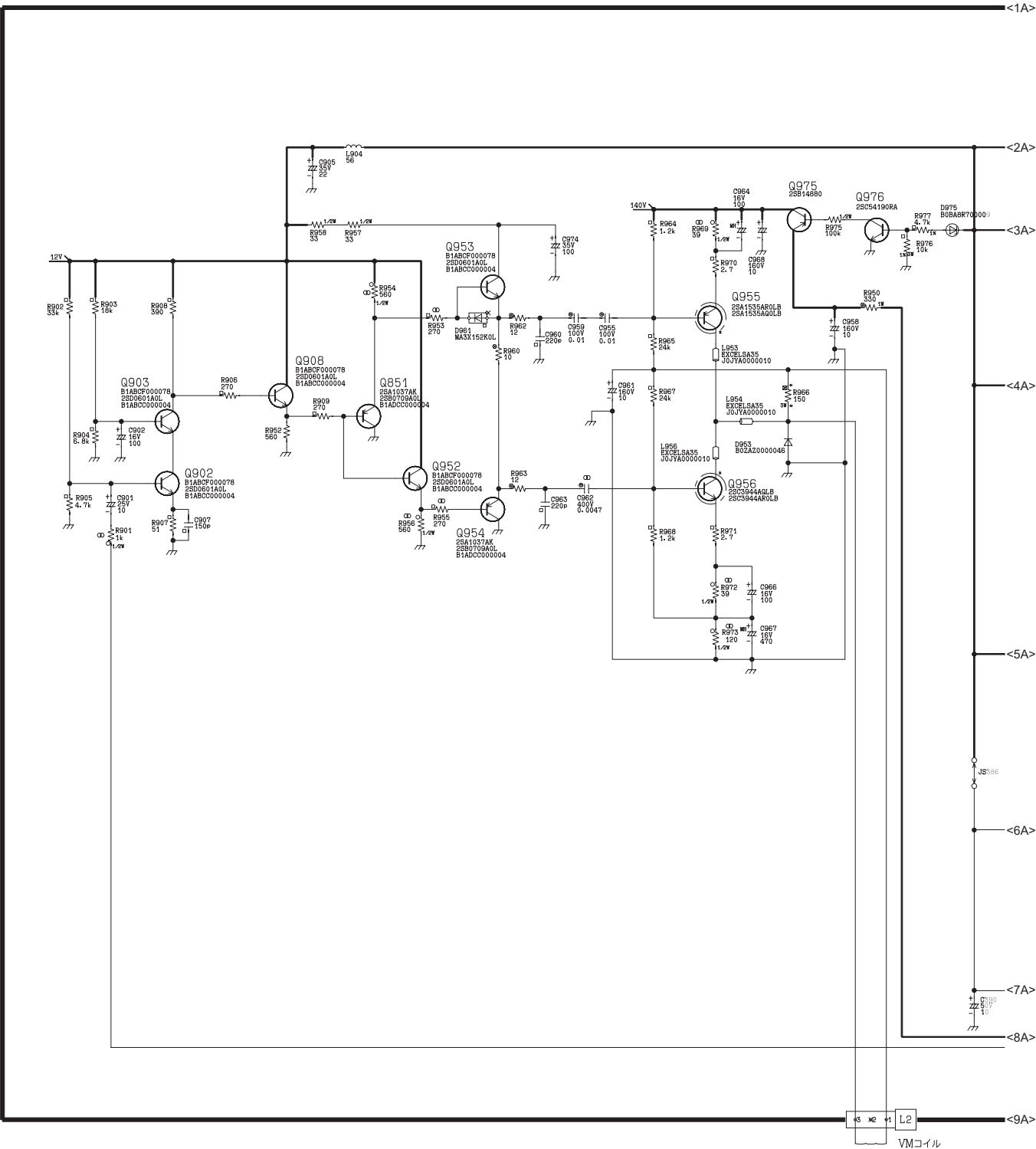


DG2 TNP4G203AA

DIGICOMB2 BOARD


12V
140V
L904
56
C905
35V
22
R958
33
R957
33
C974
35V
100
R964
1.2k
R969
39
C964
16V
100
C968
160V
10
Q975
2SB14880
Q976
2SC54190RA
R975
100k
R977
4.7k
R976
10k
D975
B0BA6R700009
Q953
B1ABCF000078
2SD0601A0L
B1ABCC000004
R954
560
R953
270
D961
MA3X152K0L
R962
12
R960
10
C960
220p
C959
100V
0.01
C955
100V
0.01
Q955
2SA1535AR0LB
2SA1535AQ0LB
R965
24k
R950
330
C958
160V
10
L953
EXCELSA35
J0JYA0000010
R902
33k
R903
18k
R908
390
Q903
B1ABCF000078
2SD0601A0L
B1ABCC000004
R906
270
Q908
B1ABCF000078
2SD0601A0L
B1ABCC000004
R909
270
R952
560
Q851
2SA1037AK
2SB0709A0L
B1ADCC000004
R904
6.8k
C902
16V
100
C961
160V
10
R967
24k
L954
EXCELSA35
J0JYA0000010
R966
150
L956
EXCELSA35
J0JYA0000010
D953
B0ZAZ0000046
Q902
B1ABCF000078
2SD0601A0L
B1ABCC000004
R905
4.7k
C901
25V
10
R901
1k
R907
51
C907
150p
Q952
B1ABCF000078
2SD0601A0L
B1ABCC000004
R963
12
C962
400V
0.0047
C963
220p
R956
560
R955
270
Q954
2SA1037AK
2SB0709A0L
B1ADCC000004
Q956
2SC3944AQLB
2SC3944AR0LB
R968
1.2k
R971
2.7
R972
39
C966
16V
100
R973
120
C967
16V
470
JS586
C969
50V
10
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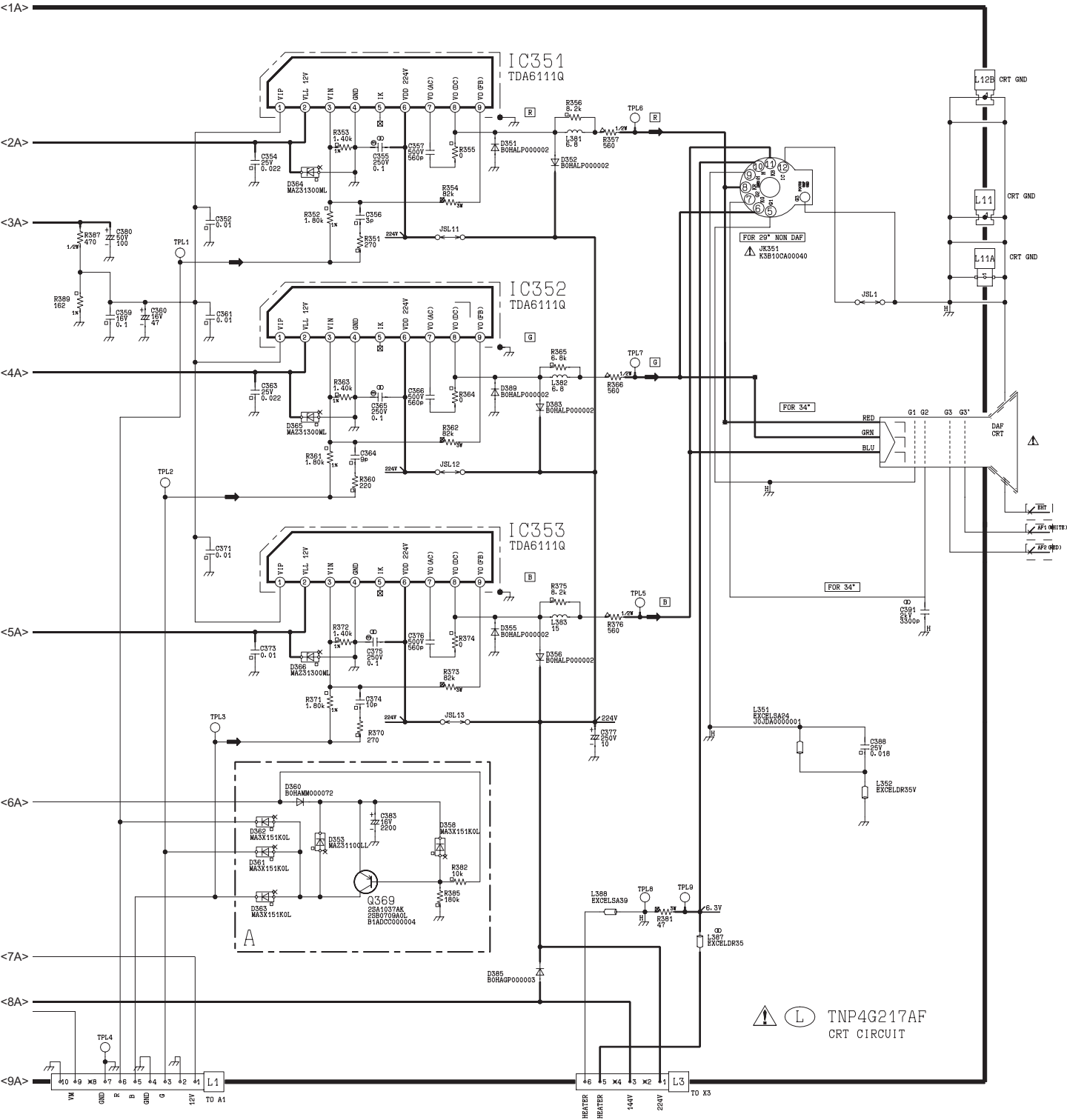
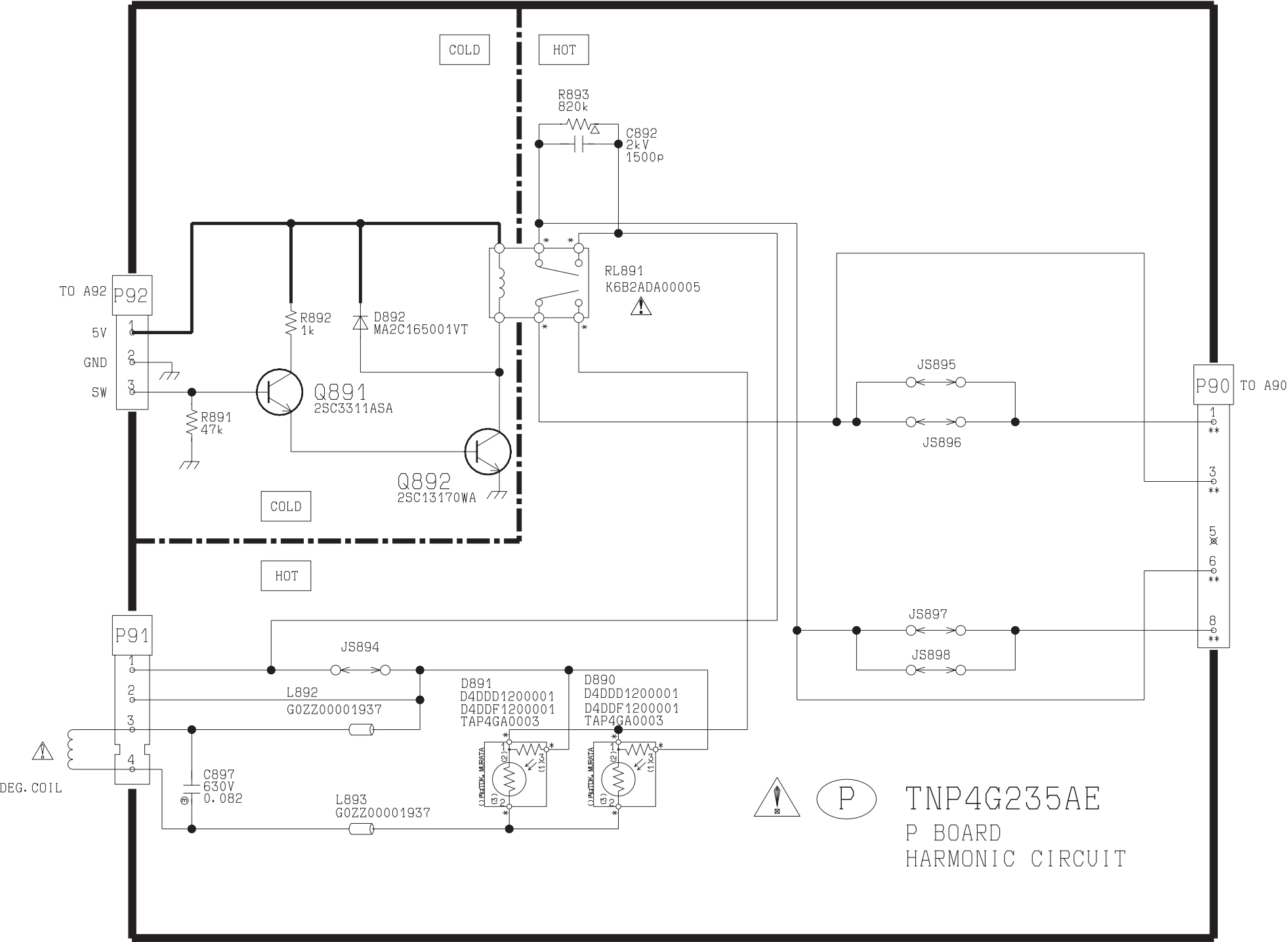
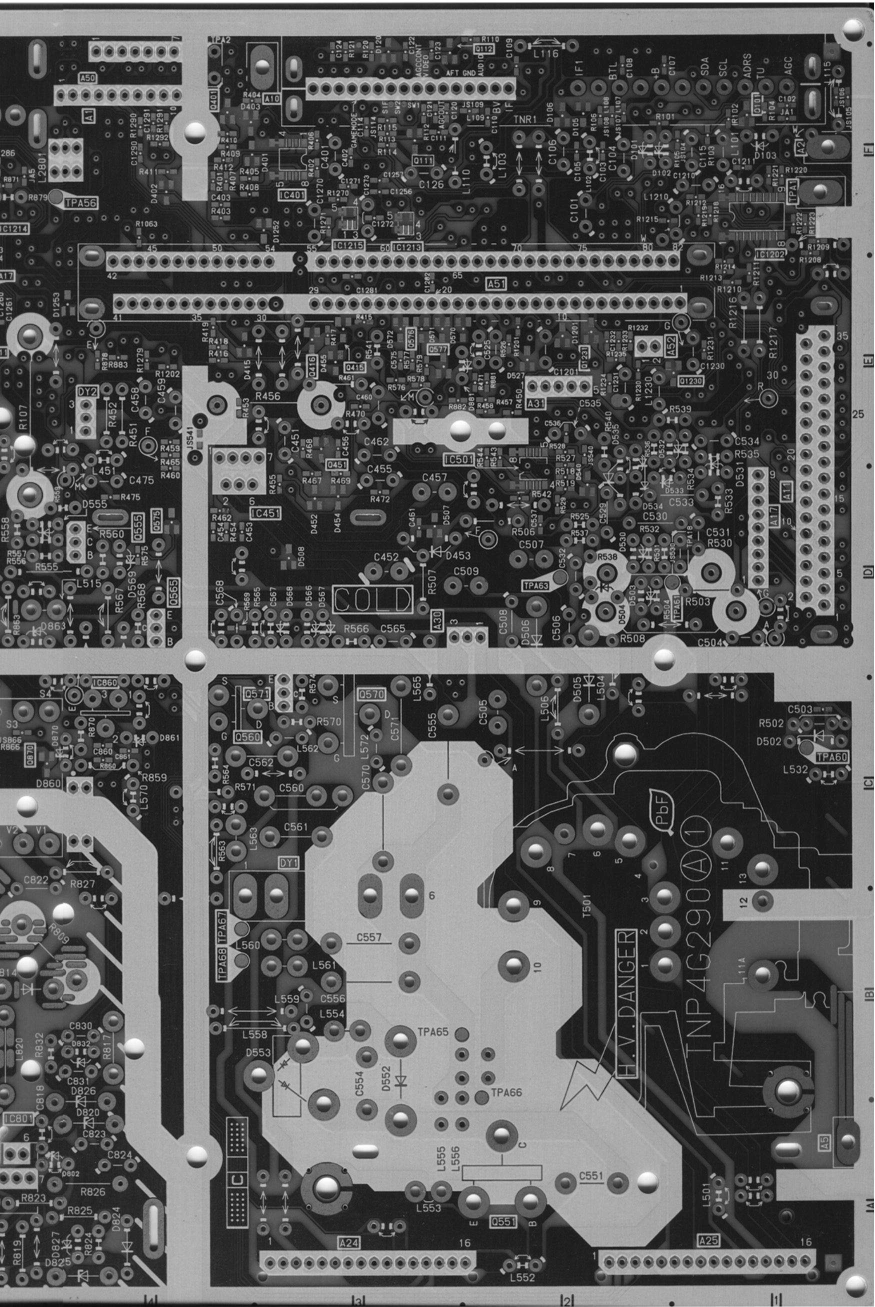
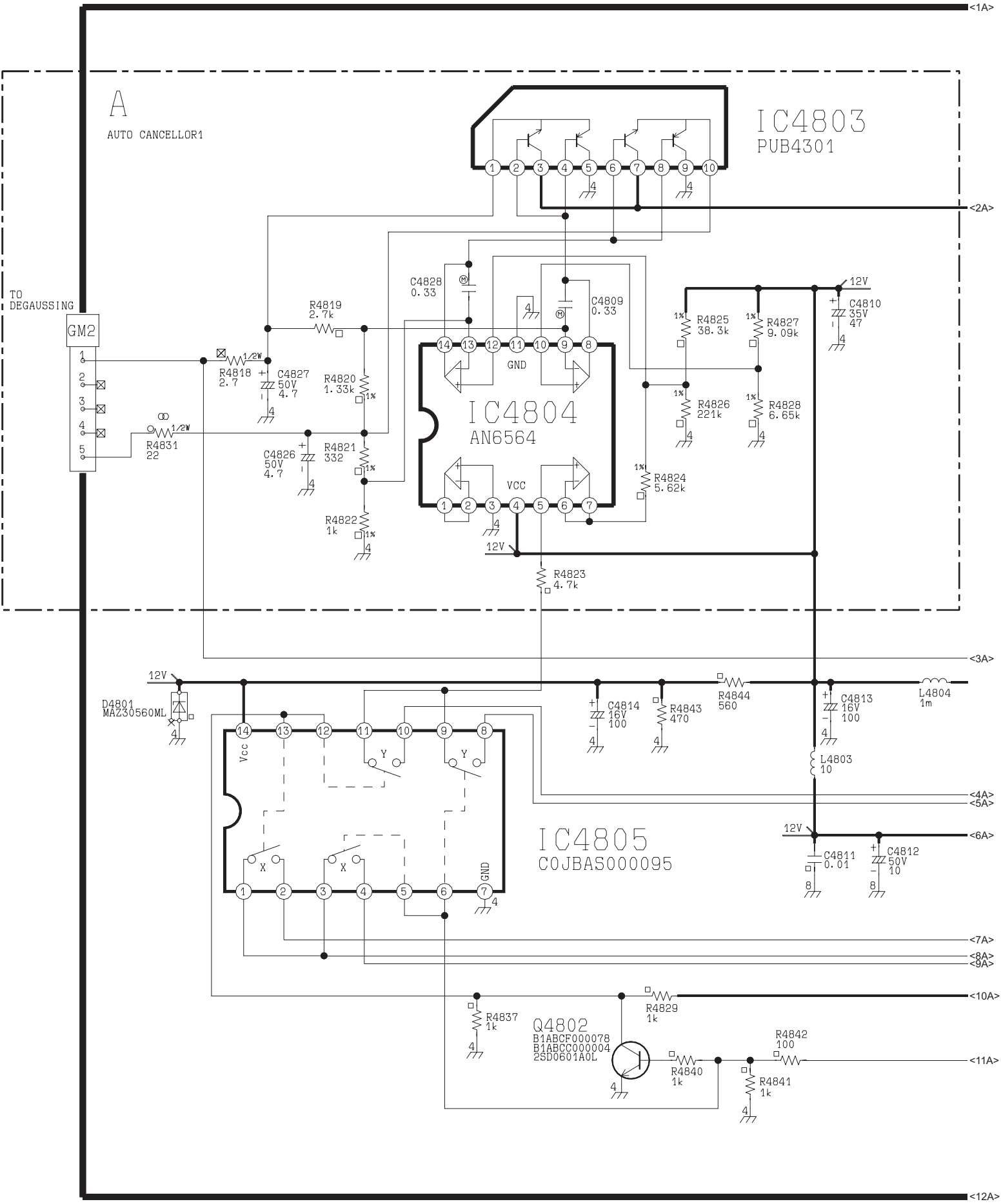
L2
VMコイル


IC351
TDA6111Q
IC352
TDA6111Q
IC353
TDA6111Q
VIP
VLL 12V
VIN
GND
IK
VDD 224V
VO (AC)
VO (DC)
VO (FB)
R
G
B
TPL1
TPL2
TPL3
TPL4
TPL5
TPL6
TPL7
TPL8
TPL9
JSL11
JSL12
JSL13
JSL1
224V
FOR 29" NON DAF
JK351
K3B10CA00040
FOR 34"
RED
GRN
BLU
G1 G2 G3 G3'
DAF
CRT
L12B CRT GND
L11 CRT GND
L11A CRT GND
EHT
AF1 (WHITE)
AF2 (GND)
D360 B0HAMM000072
D362 MA3X151K0L
D361 MA3X151K0L
D363 MA3X151K0L
D353 MAZ3110OLL
Q369
2SA1037AK,
2SB709A0L
B1ADC000004
D385 B0HAGP000003
A
L1
TO A1
L3
TO X3
VM
GND
R
B
GND
G
12V
HEATER
HEATER
144V
224V
TNP4G217AF
CRT CIRCUIT


COLD
HOT
R893
820k
C892
2kV
1500p
RL891
K6B2ADA00005
TO A92
P92
5V
GND
SW
R892
1k
D892
MA2C165001VT
Q891
2SC3311ASA
R891
47k
Q892
2SC13170WA
COLD
HOT
JS895
JS896
P90
TO A90
JS897
JS898
P91
JS894
L892
G0ZZ00001937
D891
D4DDD1200001
D4DDF1200001
TAP4GA0003
D890
D4DDD1200001
D4DDF1200001
TAP4GA0003
DEG. COIL
C897
630V
0.082
L893
G0ZZ00001937
P
TNP4G235AE
P BOARD
HARMONIC CIRCUIT

S1281
CH
VOL
S1282
R1282
VOL
S1283
R1054
TV/AV
D1060
D1061
R1051
C1051
C1053
S1284
R1052
D1052
R1053
D1053
S1285
RESET
C1052
C1065
D1065
R1057
BROWN
BLUE
T5AL
S801
F801
C801
C802
C803
C804
C805
C806
C807
C808
C809
C810
C811
C812
C813
C814
C815
C816
C817
C818
C819
C820
C821
C822
C823
C824
C825
C826
C827
C828
C829
C830
C831
C832
C833
C834
C835
C836
C837
C838
C839
C840


TNP4G290(A)(1)
H.V.DANGER
COLD
PbF
T501
IC401
IC451
IC501
IC801
IC860
IC1202
IC1213
IC1214
IC1215
A1
A2
A5
A10
A11
A17
A24
A25
A30
A31
A50
A51
A52
DY1
DY2
TPA1
TPA2
TPA56
TPA60
TPA63
TPA65
TPA66
TPA67
TPA68
TNR1
IF1
BTL
+B
SDA
SCL
ADRS
TU
AGC
AFT
GND
AUDIO
VIDEO
AGCCONT
AGCOUT
GAMEMODE
SIF
BV
IF
Q111
Q112
Q401
Q415
Q416
Q451
Q551
Q555
Q560
Q565
Q570
Q571
Q575
Q576
Q577
Q870
Q1230
Q1231
Q101
L116
L501
L552
L553
L555
L556
L558
L560
L561
C551
C557
R456
R538
R503
R508
C504
C503
R502
D502
L532
F
E
D
C
B
A
1
2
3
4


A
AUTO CANCELLOR1
IC4803
PUB4301
TO
DEGAUSSING
GM2
R4818
2.7
1/2W
C4827
50V
4.7
R4819
2.7k
R4820
1.33k
1%
R4831
22
1/2W
C4826
50V
4.7
R4821
332
1%
R4822
1k
1%
C4828
0.33
C4809
0.33
GND
IC4804
AN6564
VCC
R4824
5.62k
1%
R4825
38.3k
1%
R4826
221k
1%
R4827
9.09k
1%
R4828
6.65k
1%
12V
C4810
35V
47
R4823
4.7k
<1A>
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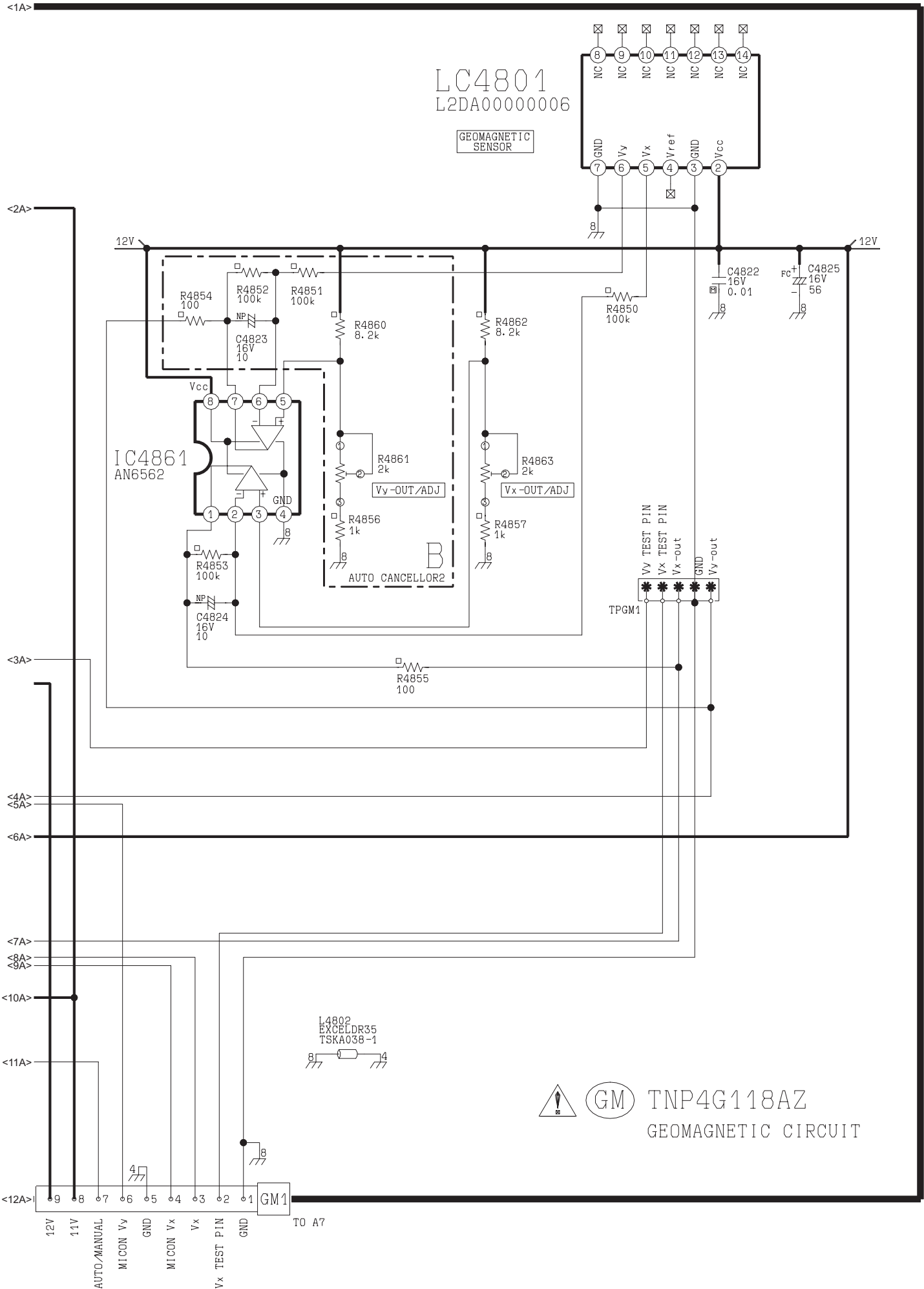
D4801
MAZ30560ML
C4814
16V
100
R4843
470
R4844
560
C4813
16V
100
L4804
1m
L4803
10
IC4805
C0JBAS000095
Vcc
GND
X
Y
C4811
0.01
C4812
50V
10
R4837
1k
Q4802
B1ABCF000078
B1ABCC000004
2SD0601A0L
R4829
1k
R4840
1k
R4842
100
R4841
1k


LC4801
L2DA00000006
GEOMAGNETIC SENSOR
NC NC NC NC NC NC NC
GND Vy Vx Vref GND Vcc
12V
R4854 100
R4852 100k
R4851 100k
R4850 100k
C4822 16V 0.01
C4825 16V 56
C4823 16V 10
R4860 8.2k
R4862 8.2k
Vcc
IC4861
AN6562
GND
R4861 2k
Vy-OUT/ADJ
R4863 2k
Vx-OUT/ADJ
R4856 1k
R4857 1k
AUTO CANCELLOR2
R4853 100k
C4824 16V 10
R4855 100
Vy TEST PIN
Vx TEST PIN
Vx-out
GND
Vy-out
TPGM1
L4802
EXCELDR35
TSKA038-1
TNP4G118AZ
GEOMAGNETIC CIRCUIT
GM1
TO A7
12V
11V
AUTO/MANUAL
MICON Vy
GND
MICON Vx
Vx
Vx TEST PIN
GND
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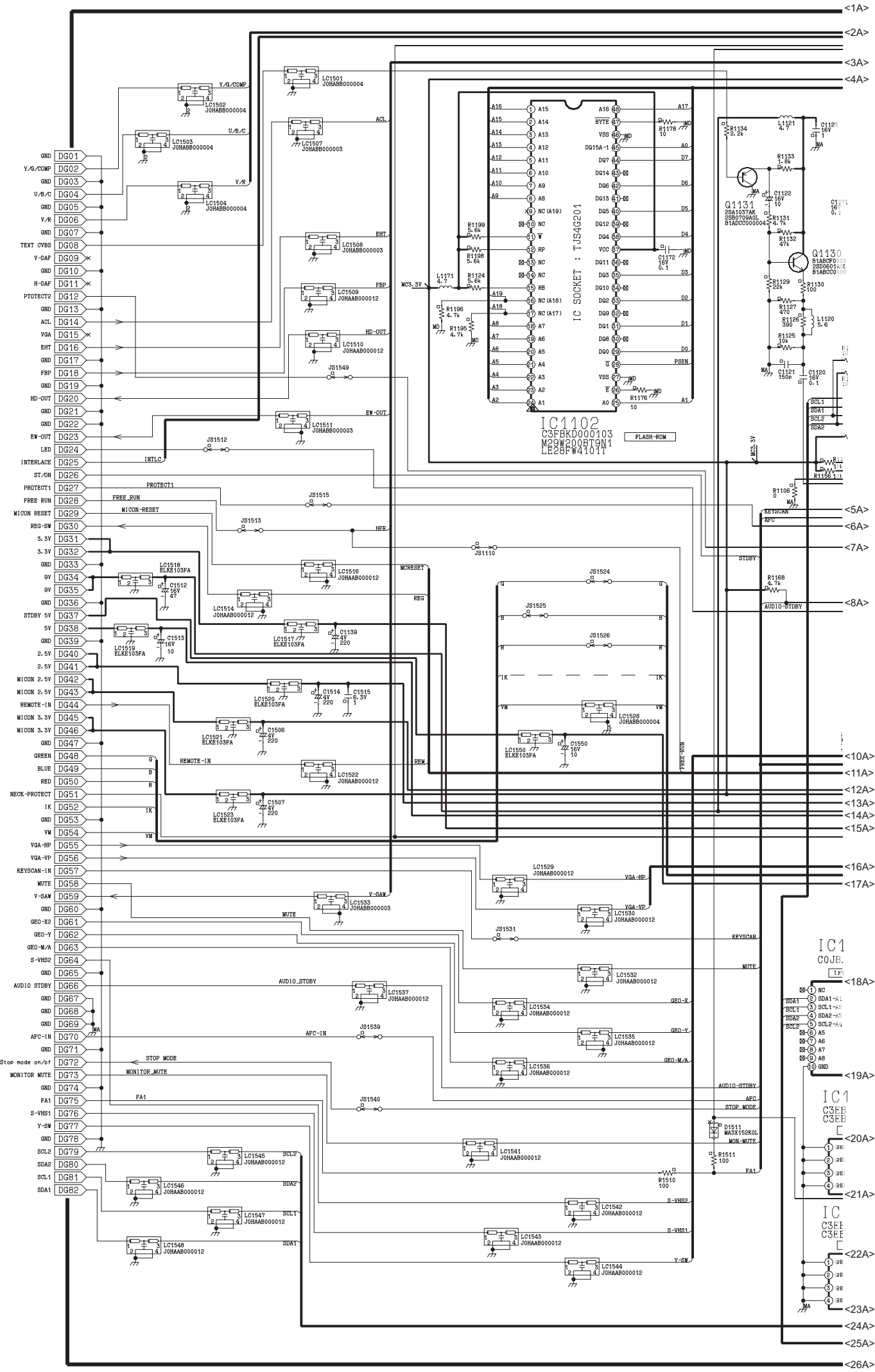
GND DG01
Y/G/COMP DG02
GND DG03
U/B/C DG04
GND DG05
V/R DG06
GND DG07
TEXT CVBS DG08
V-DAF DG09
GND DG10
H-DAF DG11
PTOTECT2 DG12
GND DG13
ACL DG14
VGA DG15
EHT DG16
GND DG17
FBP DG18
GND DG19
HD-OUT DG20
GND DG21
GND DG22
EW-OUT DG23
LED DG24
INTERLACE DG25
ST/ON DG26
PROTECT1 DG27
FREE RUN DG28
MICON RESET DG29
REG-SW DG30
3.3V DG31
3.3V DG32
GND DG33
9V DG34
9V DG35
GND DG36
STDBY 5V DG37
5V DG38
GND DG39
2.5V DG40
2.5V DG41
MICON 2.5V DG42
MICON 2.5V DG43
REMOTE-IN DG44
MICON 3.3V DG45
MICON 3.3V DG46
GND DG47
GREEN DG48
BLUE DG49
RED DG50
NECK-PROTECT DG51
IK DG52
GND DG53
VM DG54
VGA-HP DG55
VGA-VP DG56
KEYSCAN-IN DG57
MUTE DG58
V-SAW DG59
GND DG60
GEO-X2 DG61
GEO-Y DG62
GEO-M/A DG63
S-VHS2 DG64
GND DG65
AUDIO STDBY DG66
GND DG67
GND DG68
GND DG69
AFC-IN DG70
GND DG71
Stop mode on/of DG72
MONITOR MUTE DG73
GND DG74
FA1 DG75
S-VHS1 DG76
Y-SW DG77
GND DG78
SCL2 DG79
SDA2 DG80
SCL1 DG81
SDA1 DG82
IC SOCKET : TVS4G201
IC1102
C3FBKD000103
M29W200BT9N1
LE28FW4101T
FLASH-ROM
Q1131
2SA1037AK
2SB0709AGL
B1ADCC000004
Q1130
B1ABCF000
2SD0601A
B1ABCC000
LC1501 J0HABB000004
LC1502 J0HABB000004
LC1503 J0HABB000004
LC1504 J0HABB000004
LC1507 J0HAAB000003
LC1508 J0HABB000003
LC1509 J0HAAB000012
LC1510 J0HAAB000012
LC1511 J0HABB000003
LC1516 J0HAAB000012
LC1514 J0HAAB000012
LC1522 J0HAAB000012
LC1533 J0HABB000003
LC1537 J0HAAB000012
LC1539
LC1545 J0HAAB000012
LC1546 J0HAAB000012
LC1547 J0HAAB000012
LC1548 J0HAAB000012
LC1541 J0HAAB000012
LC1542 J0HAAB000012
LC1543 J0HAAB000012
LC1544 J0HAAB000012
LC1528 J0HABB000004
LC1529 J0HAAB000012
LC1530 J0HAAB000012
LC1532 J0HAAB000012
LC1534 J0HAAB000012
LC1535 J0HAAB000012
LC1536 J0HAAB000012
LC1518 ELKE103FA
LC1519 ELKE103FA
LC1520 ELKE103FA
LC1521 ELKE103FA
LC1523 ELKE103FA
LC1517 ELKE103FA
LC1550 ELKE103FA
JS1549
JS1512
JS1515
JS1513
JS1110
JS1524
JS1525
JS1526
JS1531
JS1539
JS1540
INTLC
PROTECT1
FREE_RUN
MICON-RESET
MCRESET
REG
HFR
EW-OUT
HD-OUT
FBP
EHT
ACL
V-SAW
MUTE
REMOTE-IN
AUDIO_STDBY
AFC-IN
STOP MODE
MONITOR_MUTE
FA1
KEYSCAN
AFC
STDBY
AUDIO-STDBY
MC3.3V
D1511 MA3X152K0L
R1511 100
R1510 100
R1106 0
R1168 4.7k
R1176 10
R1178 10
R1172 16V 0.1
R1134 2.2k
R1133 1.8k
R1131 4.7k
R1132 47k
R1129 22k
R1130 100
R1127 470
R1126 390
R1125 10k
L1121 4.7
L1120 5.6
C1121 150p
C1120 0.1
C1122 16V 10
C1123 16V 1
C1171 16V 0.1
C1172 16V 0.1
C1512 16V 47
C1513 16V 10
C1514 4V 220
C1515 6.3V 1
C1506 4V 220
C1507 4V 220
C1139 4V 220
C1550 16V 10
R1199 5.6k
R1198 5.6k
R1124 5.6k
L1171 4.7
R1196 4.7k
R1195 4.7k
SCL1
SDA1
SCL2
SDA2
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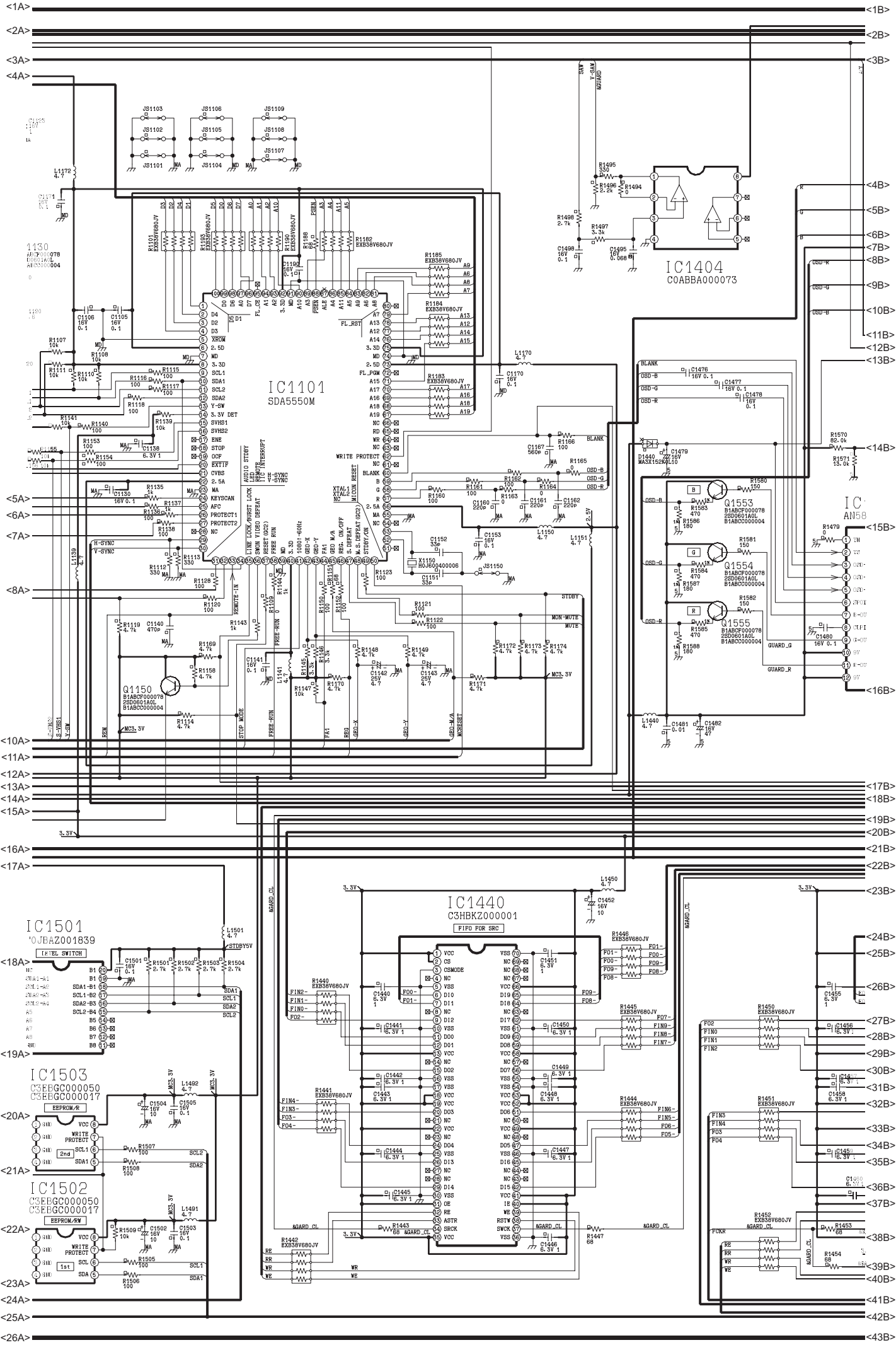
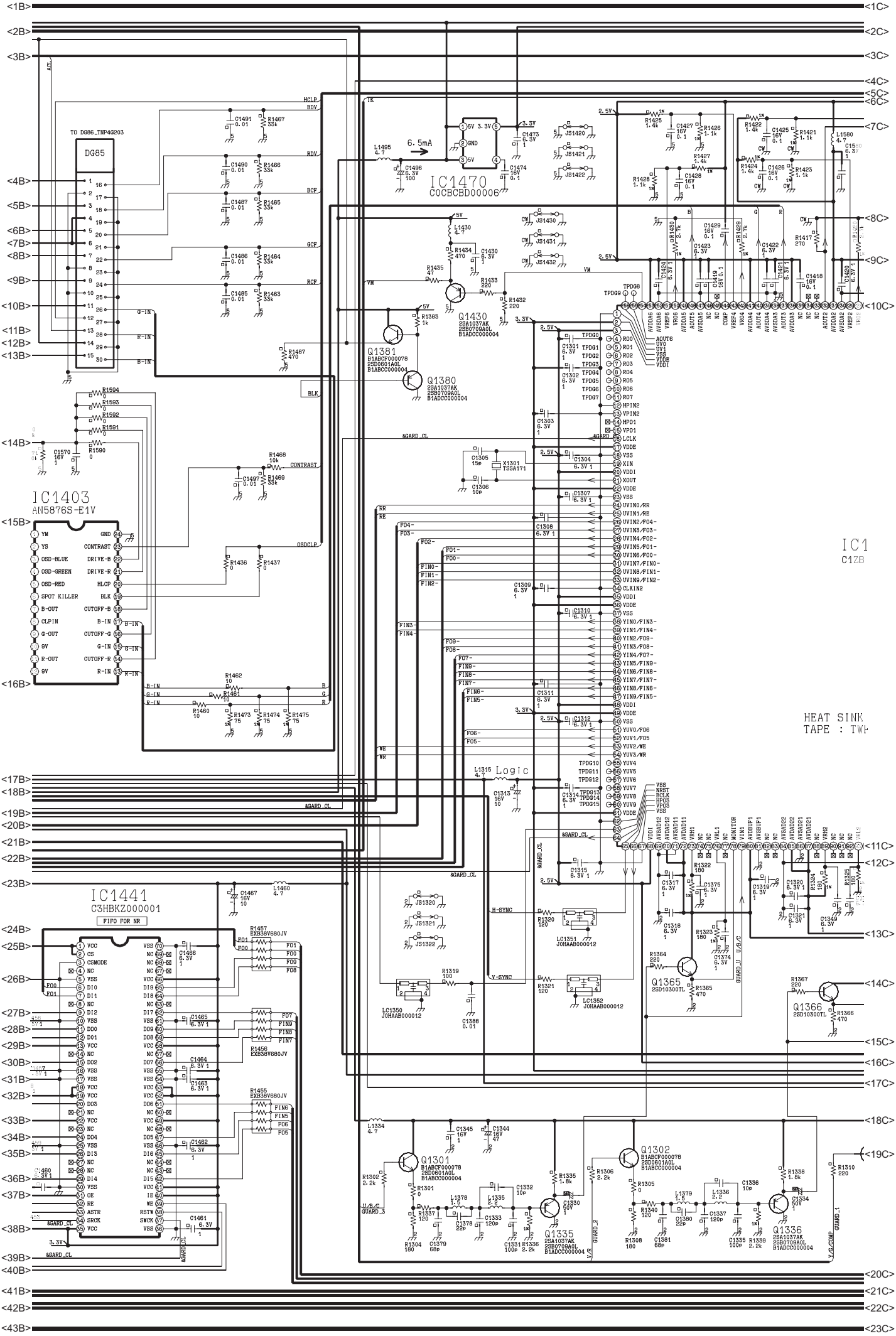
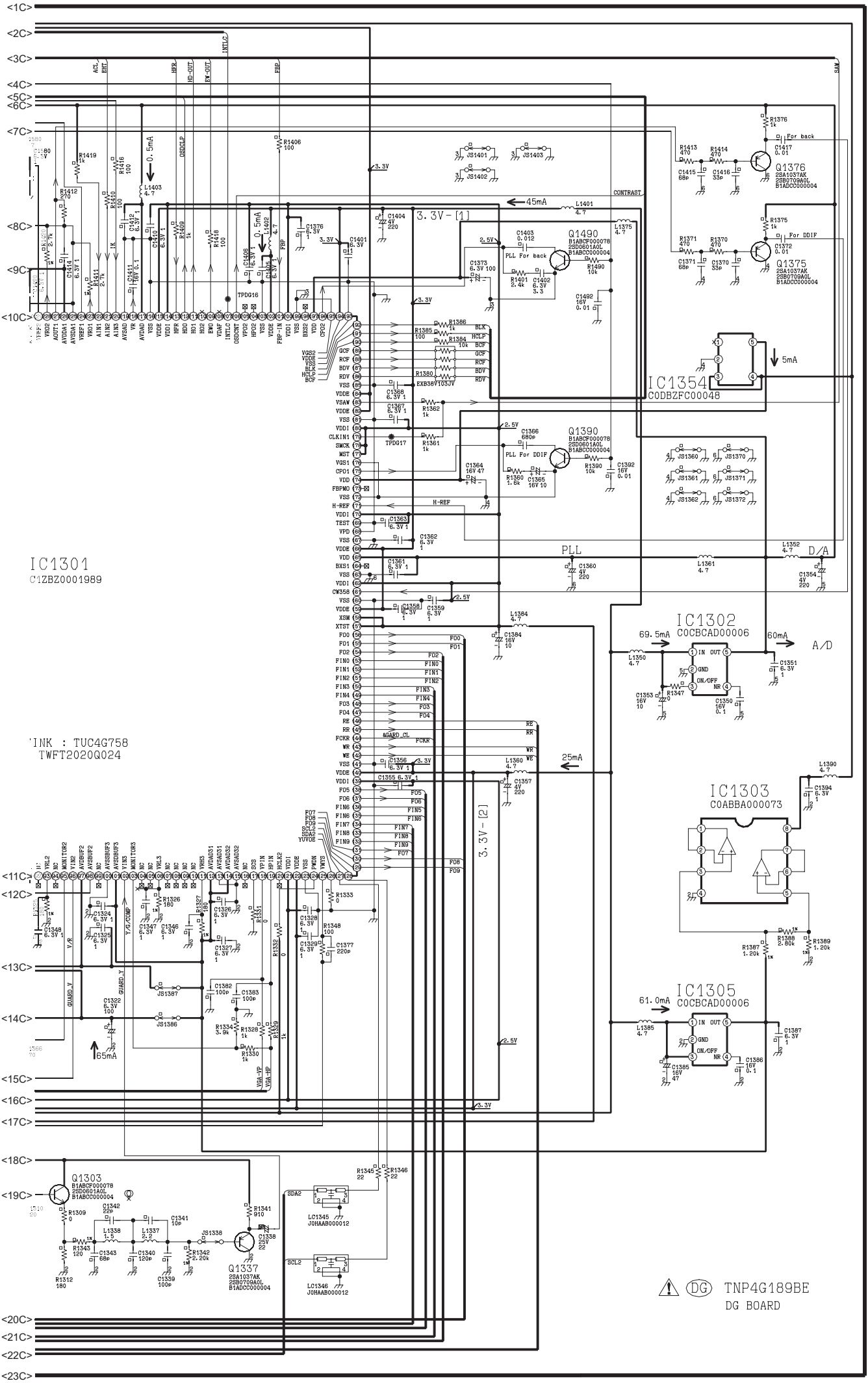
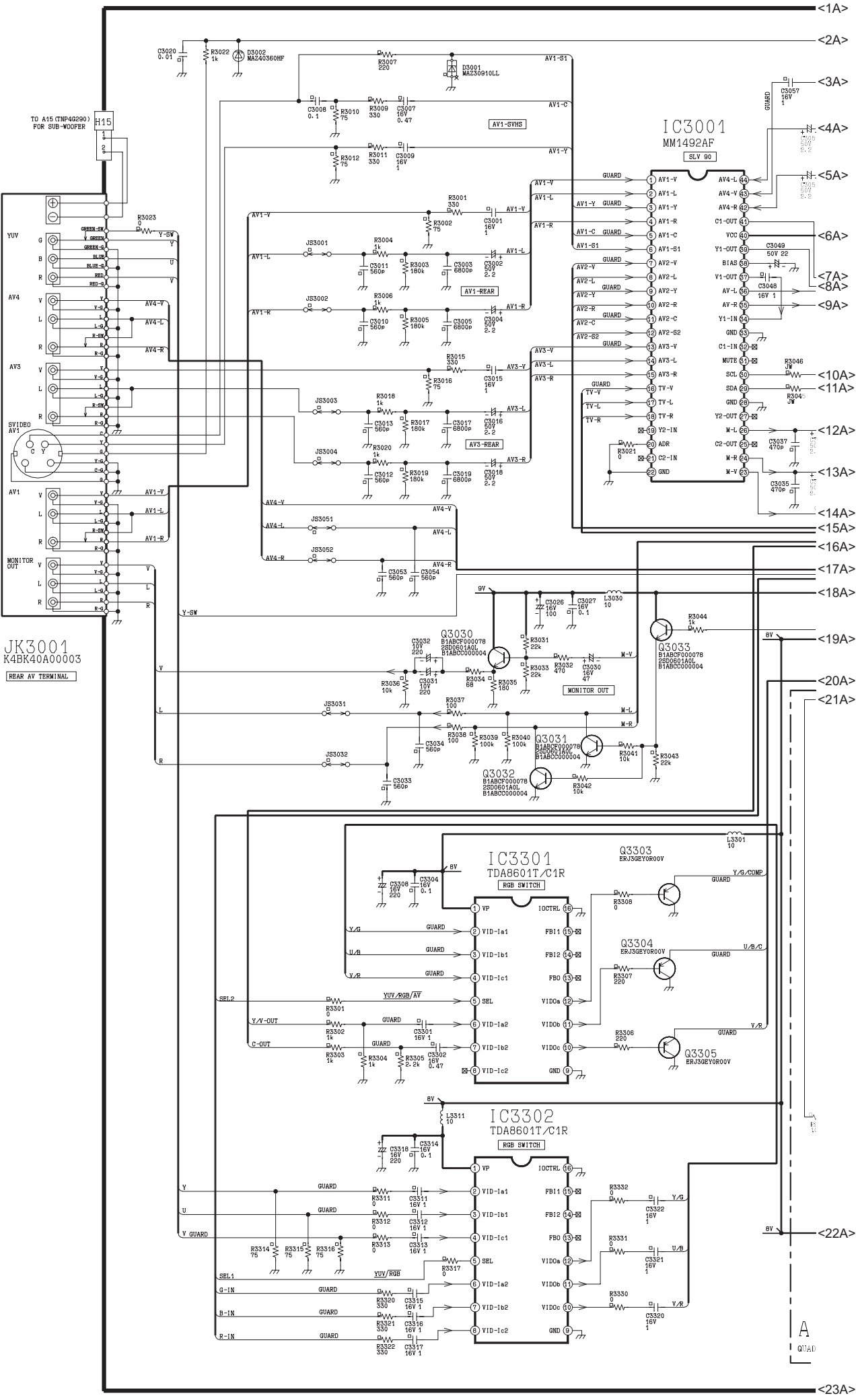

IC1101
SDA5550M
IC1404
C0ABBA000073
IC1440
C3HBKZ000001
FIFO FOR SRC
IC1501
IC1503
IC1502
Q1150
Q1553
Q1554
Q1555
1130


IC1470
C0CBCBD00006
IC1403
AN5876S-E1V
IC1441
C3HBKZ000001
FIFO FOR NR
Logic
IC1
C1ZB
HEAT SINK
TAPE : TWH
Q1301
Q1302
Q1335
Q1336
Q1365
Q1366
Q1380
Q1381
Q1430
TO DG86_TNP4G203
DG85


IC1301
C1ZBZ0001989
'INK : TUC4G758
TWFT2020Q024
IC1354
C0DBZFC00048
IC1302
C0CBCAD00006
IC1303
C0ABBA000073
IC1305
C0CBCAD00006
Q1490
Q1376
Q1375
Q1390
Q1303
Q1337
3.3V-[1]
3.3V-[2]
PLL
D/A
A/D
CONTRAST
45mA
25mA
65mA
5mA
69.5mA
60mA
61.0mA
TNP4G189BE
DG BOARD


IC3001
MM1492AF
SLV 90
IC3301
TDA8601T/C1R
RGB SWITCH
IC3302
TDA8601T/C1R
RGB SWITCH
JK3001
K4BK40A00003
REAR AV TERMINAL
AV1-SVHS
AV1-REAR
AV3-REAR
MONITOR OUT
Q3030
Q3031
Q3032
Q3033
Q3303
Q3304
Q3305
TO A15 (TNP4G290)
FOR SUB-WOOFER
H15
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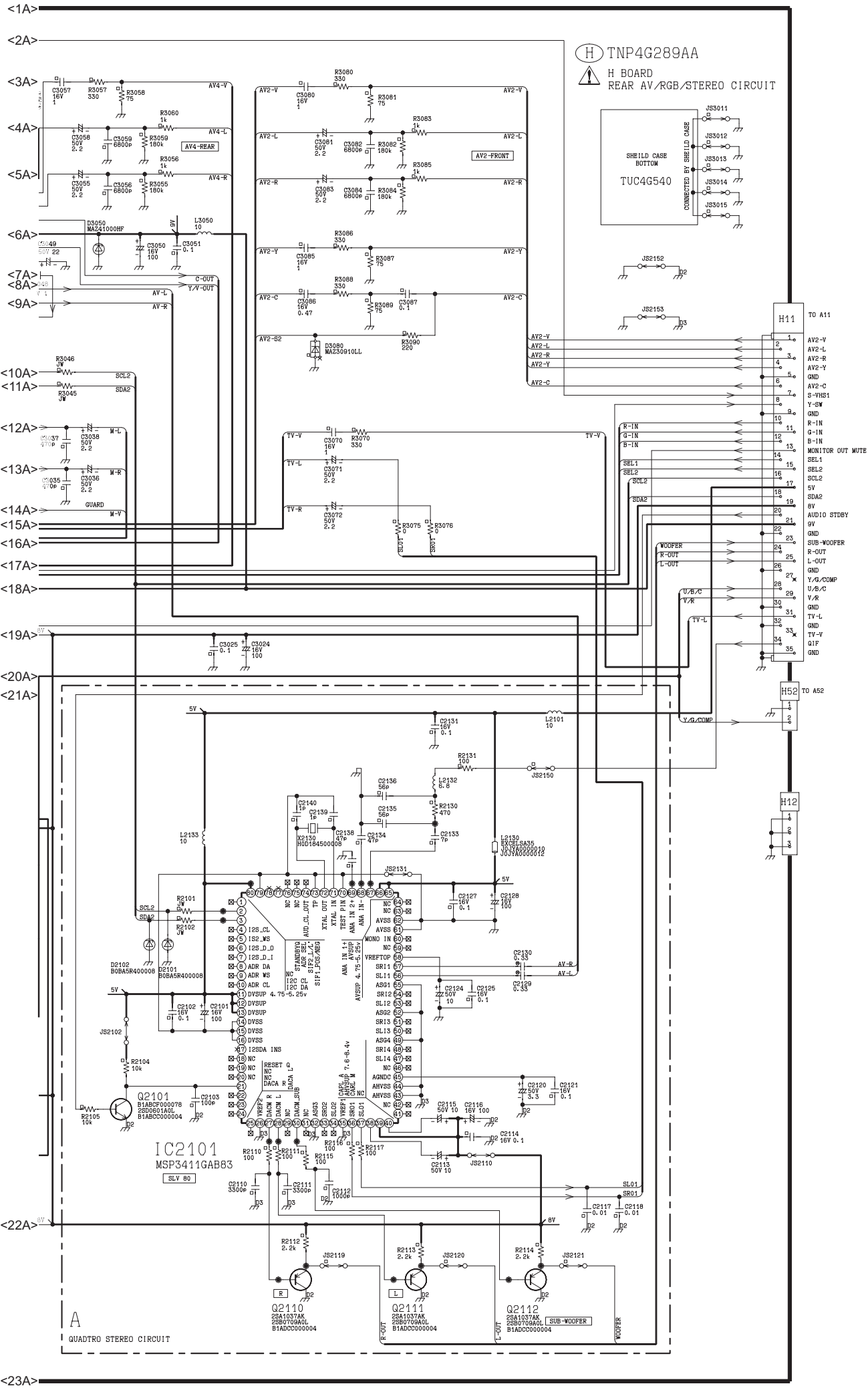
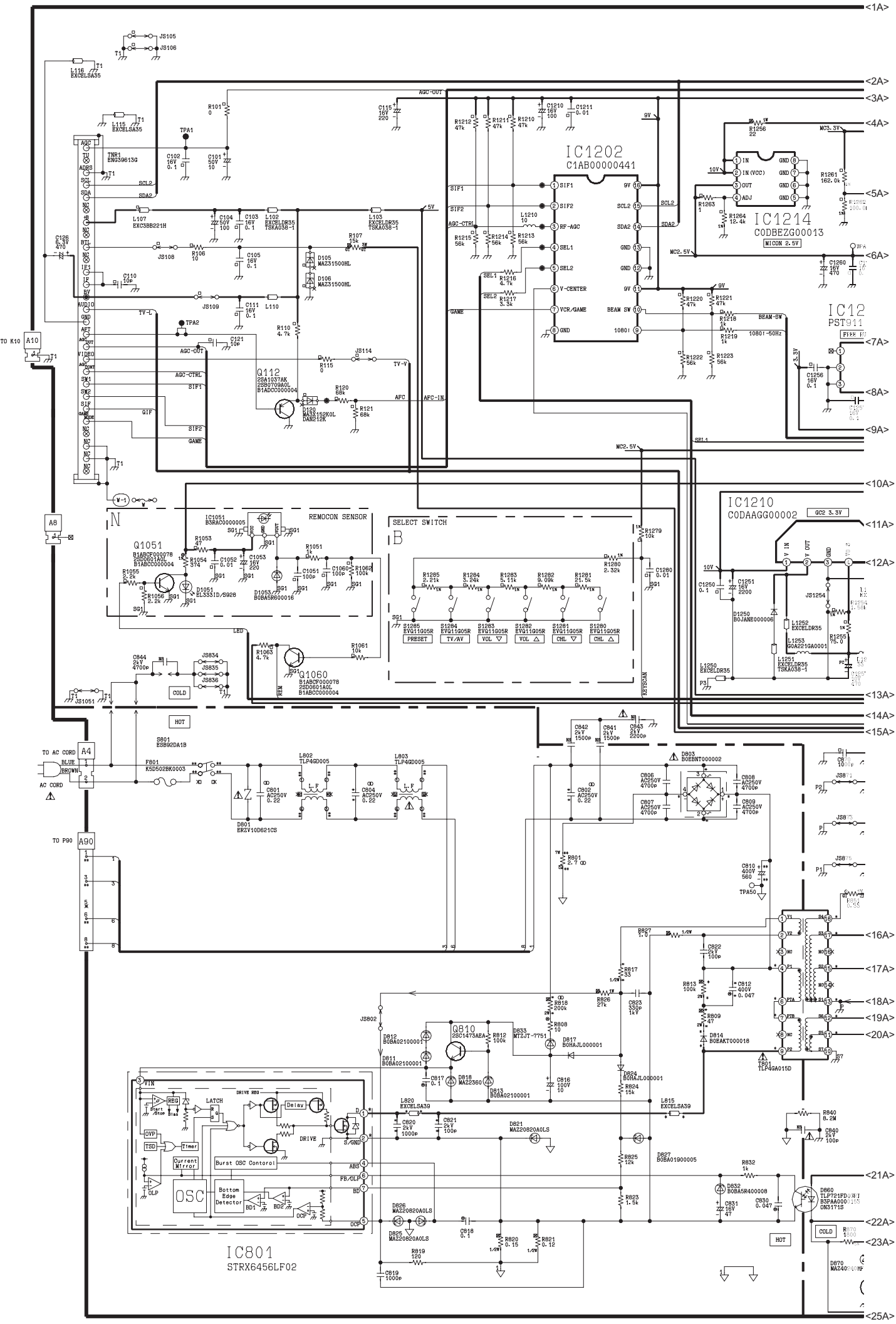
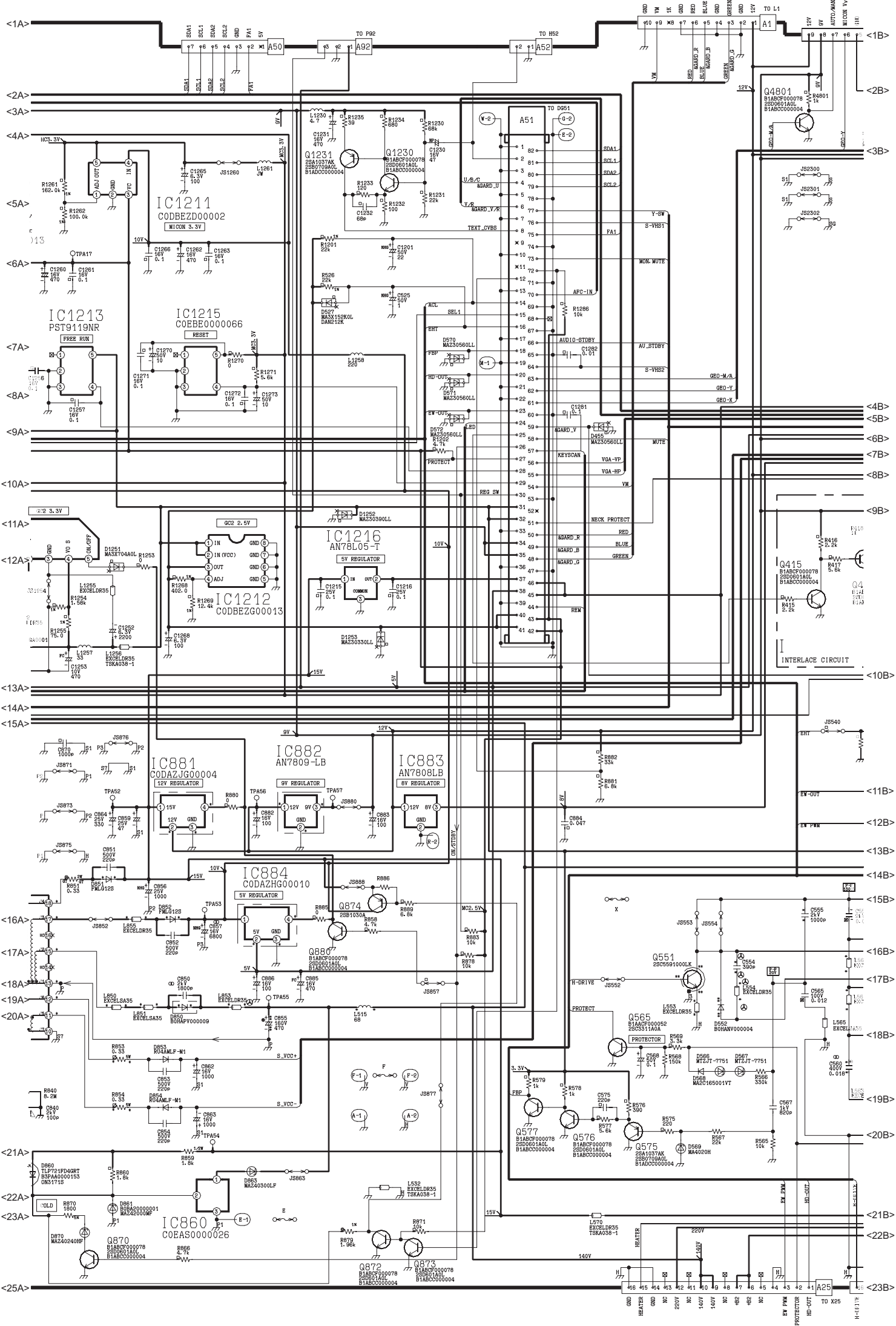

H TNP4G289AA
H BOARD
REAR AV/RGB/STEREO CIRCUIT
SHEILD CASE BOTTOM
TUC4G540
CONNECTED BY SHEILD CASE
JS3011
JS3012
JS3013
JS3014
JS3015
AV4-REAR
AV2-FRONT
JS2152
JS2153
H11
TO A11
AV2-V
AV2-L
AV2-R
AV2-Y
GND
AV2-C
S-VHS1
Y-SW
R-IN
G-IN
B-IN
MONITOR OUT MUTE
SEL1
SEL2
SCL2
5V
SDA2
8V
AUDIO STDBY
9V
SUB-WOOFER
R-OUT
L-OUT
Y/G/COMP
U/B/C
V/R
TV-L
TV-V
QIF
H52
TO A52
H12
IC2101
MSP3411GAB83
SLV 80
Q2101
Q2110
Q2111
Q2112
SUB-WOOFER
A
QUADTRO STEREO CIRCUIT


IC1202
C1AB00000441
IC1214
C0DBEZG00013
MICON 2.5V
IC12
PST911
IC1210
C0DAAGG00002
GC2 3.3V
IC801
STRX6456LF02
REMOCON SENSOR
SELECT SWITCH
Q1051
Q1060
Q112
Q810
TO K10
TO AC CORD
TO P90
AC CORD
COLD
HOT
AGC-OUT
TV-L
TV-V
AFC
AFC-IN
SIF1
SIF2
GAME
SCL2
SDA2
BEAM-SW
LED
KEYSCAN


IC1211
C0DBEZD00002
MICON 3.3V
IC1213
PST9119NR
FREE RUN
IC1215
C0EBE0000066
RESET
IC1212
C0DBEZG00013
GC2 3.3V
GC2 2.5V
IC1216
AN78L05-T
5V REGULATOR
IC881
C0DAZJG00004
12V REGULATOR
IC882
AN7809-LB
9V REGULATOR
IC883
AN7808LB
8V REGULATOR
IC884
C0DAZHG00010
5V REGULATOR
IC860
C0EAS0000026
A50
A92
A52
A51
A1
A25
TO P92
TO H52
TO DG51
TO L1
TO X25
Q1231
Q1230
Q4801
Q415
Q551
Q565
Q577
Q576
Q575
Q870
Q872
Q873
Q874
Q880
INTERLACE CIRCUIT
SDA1
SCL1
SDA2
SCL2
FA1
5V
9V
12V
MICON 3.3V
TEXT_CVBS
Y-SW
S-VHS1
MON.MUTE
AFC-IN
AUDIO-STDBY
AU_STDBY
S-VHS2
GEO-M/A
GEO-Y
GEO-X
KEYSCAN
VGA-VP
VGA-HP
VM
NECK PROTECT
RED
BLUE
GREEN
MUTE
REM
REG SW
PROTECT
LED
EHT
EW-OUT
EW PWM
HD-OUT
H-DRIVE
PROTECT
PROTECTOR
HEATER
220V
140V
ON/STBY